





Ann Arbor; D. S. Hibbard, Jackson; C. A. Green, Troy; W. P. Mills, Grand Rapids.

Best pair matched carriage horses, 4 years or over	\$15
do do do do do do do do	10
Best pair matched horses for all work, 4 years or over	10
do do do do do do do do	8
Best do do do do do do do do	8
Best single carriage horse, 4 years	6
do do do do do do do do	6
Best do do do do do do do do	6
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Best trained saddle horse	diploma

#### JACKS AND MULES.

Committee—Same as that for Horses of all Work.

For the best Mottled Jack, proved to be a good stock getter, and which has been kept in this State for months previous to exhibition, said Jack to be not less than 18 hands in height. \$20

#### Division C.—Sheep, Swine and Poultry.

##### CLASS 1—SPANISH MERINOS.

Committee—Geo. W. Lovel, Kalamazoo; Calvin Wheeler, Summit; Harvey Grey, Lapeer; Allen Crittenden, Ypsilanti; R. C. Rumsey, Brighton.

Best buck, 8 years or over	diploma and \$5
do do do do do do do do	5
Best buck, 2 years	diploma and 4
do do do do do do do do	4
Best buck, 1 year	diploma and 3
do do do do do do do do	3
Best 5 buck lambs	4
do do do do do do do do	4
Best 5 ewes, 8 years or over	8
do do do do do do do do	8
Best 5 ewes, 2 years old	6
do do do do do do do do	6
Best 5 ewes, 1 year old	5
do do do do do do do do	5
Best 5 ewe lambs	6
do do do do do do do do	6

All ewes three years old or over shall have reared a lamb during the year.

##### CLASS 2—FRENCH MERINOS.

Committee—A. S. Williams, Owosso; John Starkweather, Ypsilanti; Fred Williams, Pontiac; Merrill, Berrien; John A. Rucker, Grosse Ile.

Same premiums as for Class 1.

##### CLASS 3—SAXON AND SILESIA.

Committee—E. Arnold, Dexter; Gen. J. S. Goe, Brownsville, Pa.; Charles Clark, Springfield Ohio; Phineas White, Lapeer; Payne K. Leach, Utica.

Premiums same as for Class 1.

##### CLASS 4—SOUTHDOWNS.

Committee—A. Wakeman, Hartland; William Smith, Detroit; Jay Olmstead, Lyons; Dr. J. Perkins, Springfield; Howell Johnson, Plymouth.

Premiums same as for Class 1.

##### CLASS 5—LEICESTER AND COTSWOLDS.

Committee—S. B. Brown, St. Clair; B. O. Williams, Owosso; E. T. Bryan, Marshall; B. Peckham, Parma; W. H. Miller, Moscow.

Premiums same as for Class 1.

##### CLASS 6—FAT SHEEP.

Committee—Mark Flanagan, Detroit; Norman Allen, Parma; A. N. Kimbiss, Novi; Samuel Howlett, Detroit; S. D. McDowell, Ann Arbor.

Best pen of 5 fat sheep \$5

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##### CLASS 7—SWINE.

Committee—S. P. Wormley, Marshall; Horace D. Rood, Lapeer; John Pridgeon, California; Branch county; Rufus Thayer, Northville, L. H. Cressy, Royal Oak.

Best Essex boar, 1 year old or over	\$5
do do do do do do do do	5
Best Essex breeding sow, 1 year old	5
do do do do do do do do	5
Best lot of Essex pigs, not less than 4 in number, and not over 10 months old	5

Premiums to the same amount are offered for the same kinds of Suffolk Swine.

Premiums to the same amount are offered for the same kinds of pure Leicester swine.

Premiums to the same amount are offered for the same kinds of Berkshire swine.

Premiums to the same amount are offered for the same kinds of any other pure bred swine of breeds not enumerated; the committee to determine whether they are worthy of the encouragement of the Society.

##### GRADES AND CROSS BREED SWINE.

For the best grade or cross bred boar, 2 years old or over	\$5
do do do do do do do do	5
For the best grade or cross bred breeding sow, 2 years old or over	4
do do do do do do do do	4
For the best lot of grade or cross bred pigs not less than 4 in number, and not less than 10 months old	5
For the second best	4
For the best fat hog over one year old	5
For the best fat pig less than ten months old	3

The committee will note that there are some breeds not mentioned by name which are deserving of notice, if any individuals should be entered for premiums. Such are the Byfield, Chester and Grass Fed, all native varieties, and amongst the foreign are the Chinese, the Neapolitan, the large Yorkshires and the Lincoln. Should any of these be offered for premiums, the exhibitor must be able to prove purity of blood and directness of descent, or be content to enter amongst the grades and crosses.

In case an award is made to a single individual of a litter, and the litter is entered for premiums, there must be four in number without the one entered for a special premium, but the pig need not be ruled out of the litter otherwise, as the sow as a breeder is entitled to show the whole of her progeny, no matter what the number.

##### CLASS 8—POULTRY.

Committee—N. W. Quackenbush, Owosso; Peter Deanyers, Detroit; Woodruff, Ann Arbor; A. A. Gardner, Northville; Francis Clark, Ypsilanti.

For the best lot of Asiatic fowls, consisting of not less than two hens and one cock \$2

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#### Building Kilns and Burning Lime.

MR. EDITOR—Agreeably to your request, I will now proceed to furnish, through the medium of your paper, the information desired by your friend, Richard C. Holmes, Esq., of Cape May Court House, relative to the construction of lime-kilns, and the burning of lime, and certain incidental matters relating thereto. We have in this county, (Montgomery, Pa.) three different kinds of kilns: And first, as to the building of a wood-kiln: The breast wall should be 26 feet long, 4 feet thick, and 16 feet high; a space of five feet should be left in the middle, at the foundation, for the arch of the breast, and the arch should be 5½ feet high at the apex, and taper to 2 feet in width at the point where it opens into the pot, so as to form the eye of the kiln. Then the pot is to be started, at the same time, with the breast and arch, with a wall 16 inches thick, 5 feet wide in the clear, by 6 feet deep, and gradually battering back until, at the height of 11 feet, it attains the dimensions of 15 feet wide by 16 deep, and then be carried up straight 5 feet to the top. The space inside of the breast and around the pot must be filled in compactly with earth, as the work progresses. It is best to select, if possible, a side-hill as a site for the kiln, as it will require less artificial embankment.

2. As to filling the kiln, in order to burn it off with wood: Build a wall 8 inches thick and 18 inches high, around the bottom of the pot, leaving an aperture at the eye of the kiln 2 feet in width; on this wall place a layer of limestone, (not more than 8 inches long at first,) and then go on with successive layers of limestone, gradually increasing the thickness in such a way as to form a regular arch; this may be closed 18 inches above the top of the eye, so that the distance from the bottom of the pot to the keystone will be 7 feet. This is called "arching kiln," and requires considerable care and skill. After the kiln is arched and leveled off, nothing remains to be done, except to go on filling up with successive layers of limestone until the kiln is a little more than even full; and then it may be "topped off" in the shape of a cone, with small limestone.

3. The kiln being now filled, the next step is to prepare for burning. To do this, you must first put in a "false eye"—that is, close up the eye of the kiln with a loose wall, of the depth of 4 feet, leaving an aperture near the top, 18 inches wide and 2 feet high, to admit of the feeding of the kiln with wood, and also another smaller aperture below, and near the bottom of the eye, 12 inches square, for the draft. This false eye, and that part of the breast-arch next to the pot, and the pot itself, must all be built of some kind of stone that will resist the action of fire, such as red sandstone or soap stone.

4. The next process is to "burn off" the kiln. You begin by kindling a fire at the bottom of the pot, under the arched limestone, and keep it up by a supply of wood through the upper aperture of the eye: The kiln at first will take the wood very slowly—not more than two cords the first 12 hours.—As the mass of limestone becomes heated, the wood may be supplied more freely, and you may put in a "charge" of about one-sixth of a cord at intervals of from 15 to 20 minutes; the rule being, to keep up as brisk a fire as you reasonably can. On finishing each charge, the aperture for the wood is closed with a thin iron door or plate, which may readily be taken off for the next charge, and then be put on again, as before. The wood is cut 4 feet long, and is first put into the eye, and then pushed into the fire with a pole. The kiln will be burnt off in 48 hours or thereabouts; when the lime settles in the kiln to the depth of from 4 to 6 inches at the top, it is a sure indication that it is burned enough.

A kiln of the foregoing dimensions will hold 1,400 bushels, and will require 26 cords of oak wood to burn it. Each ton of limestone will make 16 bushels of lime, so that it would require nearly 88 tons of stone to fill the kiln. Four hands will fill a kiln in 1½ days, and 2 hands working alternately 12 hours each, will burn it off in 48 hours. From these data, your correspondent can estimate the cost of burning a kiln, if the stone can be furnished on the ground at 50 cents per perch, would be about \$200.

The foregoing remarks apply to a kiln intended for purely wood-burnt lime. But if the same kind of kiln, be filled in the same way above described, until the first course of limestone is put in above the arch, and then a layer of anthracite coal is put around the walls to alternate with each layer of the limestone, a top may be put on the kiln to the height of four feet, so as to make the kiln hold about 1,700 bushels—requiring to burn it off, only about 17 cords of wood and 3 tons

of Chestnut coal, the lime being almost, if not quite, as good as if burnt exclusively with wood. This latter is the method almost uniformly adopted in this region, for manufacturing what is called "wood-burnt lime." The method of tending this kiln is the same as before mentioned, only it may be "let out" at the expiration of 36 hours, or when the arch is sufficiently burned, as indicated by the settling: the coal, however, will continue to burn for some hours longer, until all the upper layers of stone are calcined.

When the kiln is burned off, the false eye is taken out so as to afford a clear open space into the pot under the arch; the arch is then thrown gradually, and the lime falling down on a wooden platform prepared for the purpose, is measured or loaded up with great facility and convenience.

A Set-Kiln is built precisely like a wood-kiln; only it has a middle bench at the bottom, of an oval form, of the same height (18 inches) as the thin wall around the pot, so that in filling, one end of the first course of stone rests on the bench and the other on the inner wall: each layer of limestone is to be 18 inches thick, to be followed by a layer of anthracite coal 1½ inches thick, and so on alternately, until the kiln is full. A kiln holding 1,700 bushels will require 10 tons of coal to burn it: the kind called stove coal is best, it will burn off in about 4 days or 96 hours; that portion of the limestone contiguous to the eye of the kiln, and covered in the pot must be plastered over with clay-mud; an aperture is left at the bottom of the eye to admit the draft. After the coal is ignited by kindling, at the bottom, the kiln requires no farther "tending," but may be left to itself to burn off.

A draw kiln is built with a round pot; is much smaller than a set kiln, and it has no bench; a good size is 2 feet in diameter at the bottom, tapering back to the width of 7½ feet at the bulge, and then carried plumb to the top. The kiln ought not to be less than 20 feet deep, and the bulge or greatest circumference should be about 5 feet from the top. The only fuel is anthracite coal—stove is the best—one ton of coal to every hundred bushels of lime. Two hundred bushels of lime may be drawn every 24 hours, and the great advantage of this kind of kiln is that the lime may be always fresh.

It is difficult, however, to communicate full and satisfactory information of their nature in writing; and I beg leave, therefore, to say, in conclusion, that if Mr. Holmes, whom you can furnish with my address, will come to Norristown, and call on me, I will cheerfully take him round to some of the numerous lime-kilns in this vicinity, and show him how they are built, and he can see the process of filling the kilns and burning the lime for himself.—X, in Germantown Telegraph.

#### Survey of the State Roads—Letter from the North.

Mr. Yeomans, one of our Commissioners, is suffering from ill health, and has decided to leave us for a time and go to Grand Traverse Bay, hoping this change will improve his health; if not, he will return to his home in Ionia. He drank very freely from Swamp ice water last week, and that in connection with the extreme heat in these dense pine and cedar forests, has probably caused his illness. He will convey this letter as far as he goes and then mail it. With this single exception our company are all very well. We have made examinations all around this lake, and shall begin again this afternoon to run the line of our road upon the east side of it. We are in camp not more than ten rods from the lake on the south side, and on the line of township 21, north, ranges three and four west. Our exact locality may be seen upon the map. This is a magnificent sheet of water, measuring ten miles in width. Much of the adjacent land, however, is low and marshy. We find no white men at this place and no permanent native inhabitants—a few Indian trappers only. I have taken a ramble with old chief Nouarva of the Ottawa tribe in Wisconsin. He is a fine old man, and a great hunter; he has with him eleven bear skins and many other furs. I think him all of seventy-five or eighty years of age. He does not know his age. The season for hunting and obtaining furs is now over, and to-day he leaves with his men, for their native home. The change in the weather since last Saturday is most astonishing. Up to that time snow and ice were plenty, with cold weather; now suddenly, as if by magic, we are in the land of violets of every hue, and many other beautiful flowers, and almost the atmosphere of the tropics; and all this without changing our locality at all. Two of our horses have failed recently and are left to take care of themselves, consequently each man has to carry a pack. Our provisions are also much reduced, therefore, a reduction of numbers is not much to be regretted. It may require four weeks longer to reach Mackinaw, we

move so slowly, not averaging more than three miles per day. From this last place we shall return home where we shall be glad again to meet kindred and friends.

H. H. LE ROY.

Houghton Lake, May 5th, 1859.

—Detroit Tribune.

#### Sowing Carrot Seed.

A writer in the *Country Gentleman*, gives the following directions for sowing carrot seed, and cultivating the young plants:

"The seed should be prepared as follows, at least ten days before sowing, three pounds of seed to the acre; to this add one bushel of fine, dry sand—mix them well together, which will separate your seed; with this, throw a couple of handfuls of buckwheat, to show your rows. Then put in a heap, and water the outside with liquid manure—turn over each day, and water with the same. This allows the seed to germinate equally. After sowing, I cover with a brush harrow, which is simply an old gate with brushwood, such as oak or birch, worked in between the bars; run this harrow first the same way your drills were opened, then cross them, and run the roller over all, and they are finished.

If your land should be dirty, you will see weeds before carrots. Having mixed buckwheat with your seed, you can trace your rows, and set your horse hoes to work to keep the weeds down until your plants make their appearance; when you can trace them, use hoes three inches wide to thin them. Move along and let two or three plants stand together; that will be an opening of three inches between each tuft. After this thinning, let the horse hoes again run through them. A week after this, go along again with hand hoes, and then thin to one in each place; you are then done thinning. It must be borne in mind that weeds and carrots are very bad friends, and for that reason the horse hoes must be kept going among them until the leaves nearly meet in the rows. They will then take care of themselves."

#### The Foot Rot in Sheep.

How I recognize it, and method of treatment.

The foot rot is essentially an inflammation of the softer parts of the foot, about the horny covering on the hoof, which is contagious; so if it once appears and is not checked, the whole flock is generally injured. The disease may be known by the following symptoms: The animal limps, walking as if the feet were painful; the hoofs are hot, and the skin adjoining swells, with symptoms of fever being alternately hot and cold. The ears and legs both are hot and cold by spells. The inflammation is partly in the cleft of the foot, partly in the toes under the hoof, and partly under the edge and thin part of the hoof.—The appetite fails as soon as the fever appears. If the fever abates and the appetite returns, it will go well with the sheep, unless the decay of the bone (caries) sets in, which symptom attends the most malignant form of the foot rot. On the second or third day following the appearance of the disease, the hoof and adjoining parts lose their reddish color, and become at first whitish and then pearly color, the skin in the cleft of the foot in the meantime being redder, more like the natural color. Then follows a watery discharge of exceedingly offensive odor; the skin separates from the parts beneath, and the foot becoming more painful the lameness increases. The inflammation continues to increase, and extends farther under the hoof and deeper into the flesh, and affects more extensively both parts of the foot, on both sides. The cleft becomes gradually deeper by the dividing of the flesh; the tender flesh that unites the hoof to the bones of the toes softens, and results in the hoof falling off entirely in the course of about three to four weeks.

REMEDY.—As soon as the true malignant rot is discovered in the flesh, the diseased sheep must be separated from the healthy ones, and the stables must be cleaned. The best remedy for this disease that I have found is butter of antimony (*Butyrum Antimonii*, or *chloride of antimony*) and spirits of hartshorn. The spirits of turpentine and blue vitriol mixed together are also very good. The animal must be turned up on its rump, that the foot can be thoroughly examined, and all the dead parts cut away with a sharp knife down to the living part; if it bleeds a little that does no harm. The foot must then be smeared with the mixture of turpentine and blue vitriol. It is sometimes well to bind up the foot in a linen bandage. The animal must not be allowed to go in any soft or dirty place, but should be kept on dry straw litter. Every fourth day they must be carefully examined one by one, and the remedy again applied, as long as is necessary. If this is strictly adhered to, in the course of a month the flock will be entirely sound again; the appetite will return, and the animal in a short time be

in good condition.—CARL HEYNE, in *Journal of the New York State Agricultural Society*.

#### Culture of the Lima Bean.

Select a good loamy soil. Being rank feeders they must have plenty of manure. Give your ground at least four plowings and harrowings, reducing it to a fine pulverized state. Open furrows five feet apart with the plow. Get your stakes seven feet long, place three of them thirty inches apart, two in the furrow and one thirty inches from the centre of these two—(triangular thus, \* \*)—tying them together at the top. The object of this is to strengthen them in their places. If the poles are seven inches in the ground, being thus tied, no wind will blow them down. They also bear much better, as they fruit from bottom to top. From last stake in furrow, put another one four feet from it—the other two thirty inches from it—they will then stand four feet from hill to hill, and five feet in the rows. In the next row they should be placed contra, so that they all then look as follows:

\* \* \* \* \*

You can run the cultivator through them each way. I sow from the 10th to the 20th of May, putting four beans to each pole. If all come up I take out one, leaving three to each. When they reach to the top of the poles I cut them off. Never allow them to turn over the top. By this means you throw the growth to the bottom of your plant, producing fruiting wood; whereas if they are allowed to run they make more wood than fruit. This must be continued all the season, as they grow from the top—also cut off the long side laterals. A long knife will more easily do this, by merely knocking them off, or a large pair of shears. They then at a times took neat, and are an ornament to the garden, instead of the usual way of long poles, which look in a garden like a burnt down wood of limbless trees. When kept neat by the three poles, they look like a green hedge. In harvesting, cut the strings at the top; pull up your stakes, and draw them through the vine, cutting them also at the bottom of the stakes. This prevents any earth from getting with them—haul to the barn and thresh them lightly, so that you do not break the bean. The shell is so crisp that it will easily open by running them twice through a good fanning mill, and turning fast.

—GERALD HOWATT, in *Country Gentleman*.

#### Hay Caps.

Hear what a writer in the *Country Gentleman* says of hay caps:

"I must adhere to my hay caps, and advise others to use them. Mr. Halsey says he never expects to save hay unimpaired through a two days' rain. I have done it, and hope, not to have it rain, but to do it again if it unfortunately comes. In July, 1855, I had ten tons of hay cut on four acres, by mowing machines. It was put up, and the second day covered with 200 covers. I weighed several of the cocks and they averaged 100 pounds. It rained nearly two days, and the quantity of water was two inches and four-tenths. On the third day, at 10 o'clock, I began to draw it in, only the bottom being a little wet. This saved me one day opening and spreading, and in my opinion saved one-third of the value of the hay. My caps to cover a ton, cost \$6, and the hay sold for \$12 a ton, and this saving was from three days' use of the hay caps. I have heard them so frequently commended, that Mr. Halsey's condemnation of them astonishes me very much. How much hay is injured by being wet is a matter we cannot speak of with entire certainty, but I had rather keep even the dew off of mine."

The manner of making hay caps is as follows: Purchase a piece of brown cotton, a yard and a quarter or half wide, stretch it in pleasant weather along a board fence, and apply a coat of linseed oil, with a paint brush, mixed with about one-quarter its bulk of spirits of turpentine, well stirred in while both are warm. Let the cloth hang till dry, and it will be ready for use.

Another, and perhaps a better way, is to mix two pounds of beeswax, a quart of Japan varnish, and a gallon of linseed oil together. Then apply with a brush while moderately warm.

When the cloth is dry cut it into squares, then have an eyelet hole worked in each corner, to admit small wooden pins, which are to be used to fasten the caps to the hay.—Some people sew up small stones in bags, and attach them to the corners of the caps, which keep them in position by their weight. These weights would be much handier, if attached to strong wire hooks, and kept separate from the caps, and hung on as the caps are used.—But cast-iron weights, with hooks attached, would be still better, if painted to prevent rusting.—Exchange.

(To be continued.)



## The Garden & Orchard.

Transactions of the American Pomological Society.

REPORT OF THE STANDING FRUIT COMMITTEE FOR MICHIGAN.

NUMBER FIVE.

In the last number the list of varieties for a market orchard was examined, as to its adaptation to locations near a convenient market. But inasmuch as the cities that furnish our chief markets are situated, generally, upon navigable waters, and, therefore, usually, in regions ill adapted to fruit-growing, they are largely, if not mainly, supplied from comparatively remote points; where the character of the country is such as to promise immunity from some of the casualties to which the crops would otherwise be subject.

To persons thus located, the perishable nature of the early fruits, and the disproportionate expense of marketing them in small lots, operate as a check upon the planting of such; and in favor of a more extensive planting of later varieties. Most orchardists, also, find it desirable, and, in fact, necessary to unite fruit growing with farming; by which means they find themselves fully employed during the season of marketing summer and autumn fruits, and are therefore, induced to plant exclusively winter varieties.

The choice of varieties for orchards, under these circumstances, is, frequently, still further influenced by the facilities for transportation to market. A person who is obliged to rely upon private conveyance, will find it desirable to plant a succession of varieties, which can be disposed of, at his convenience, during the winter and spring; while a location along our railroads or navigable waters, whereby the producer can transport and market a whole crop at once, will operate as an inducement to plant very few varieties; perhaps but a single one.

In case a succession of winter varieties is desired, it will be found advantageous to plant sparingly of the early winter sorts, increasing the number as the varieties increase in durability; which will enable the grower to keep back large quantities, should the state of his business, or of the market, render such a proceeding desirable. In all cases, where fruits are to be marketed in large quantities, it is well to remember that the fewer varieties the better.

Under such circumstances, the following list will prove desirable:

Fall Pippin..... 50 Rhode Isl' Greening.....200  
Hubbard's Nonsuch..... Roxbury Russet.....250  
Vandevere of N. Y. or 100 Red Canada.....400  
Westfield Seekonk.....

Where the grower has access to a railroad, or navigable water, the following varieties will be found most profitable, and, where they are all successful, should be chosen in the order here named:

1st, Red Canada; 2d, Rhode Island Greening; 3d, Roxbury Russet; and the best pecuniary results may doubtless be expected, under these circumstances, from planting the entire thousand trees of a single variety, provided that variety is adapted to the soil in which it is planted.

It is well here to remark, that Red Canada is a very slender grower, and should, therefore, be grafted on strong stocks, at standard height. Roxbury Russet, also, is an irregular, spreading variety, and somewhat tender if worked low, for which reasons it should be grown in a similar manner.

T. T. LYON.

Plymouth, May 21st, 1859.

### Cultivation of the Cranberry.

As the proper season has arrived for transplanting the cranberry vine, I wish to say a few words to the readers of the *Homestead* on the cultivation of this fruit, particularly as to the practicability of producing it in the garden. I have lived more than fifty years within one hundred rods of a cranberry marsh, which produces spontaneously at least half a dozen varieties of the cranberry, and, till within a few years, have supposed its cultivation on dry land impracticable. It is now some six years since I first observed the cranberry vine working its way into brake and ground-pine knolls, high on the hills in the pastures surrounding the marsh, and in the autumn of 1852 I gathered several quarts of the fruit from vines thus situated. These vines doubtless sprung from seeds dropped by birds. It appears to me that the belief that a plant capable of propagating itself, extending, and producing its fruit on a brake knoll, high and in the pasture, needs no extraordinary development of the organ of marvelousness.

About the same time (say in 1852) it came to my knowledge that Mr. Nelson Woodworth, of Schron River, Essex county, N. Y., had transplanted some cranberry vines from a marsh to his garden. I do not know a drier garden in Connecticut; and having since had several opportunities of observing that these

vines were flourishing and productive, I commenced a similar experiment in the spring of 1857. As the spring was cold, and very wet, the vines were not taken from the marsh till after the first of June; and owing to heavy rains, the first parcel lay several days in the cellar before they were set in drills, some twenty-two inches apart, a tuft of vines being placed at intervals of one foot in the drill.

This parcel was sufficient in quantity to set four rows twenty-six feet long. A like number of rows were afterwards set with vines fresh from the marsh, and in the latter case the tuft of vines used as before, was somewhat larger, say enough to allow an inch ring to surround the tuft without drawing the vines very closely together. These last have come forward faster than the first parcel, covering nearly the whole ground at the end of the last season's growth, which I expect it will take the others another summer to do. The last parcel have likewise borne about seven-eighths of the fruit obtained from the whole. I can assign but three conditions which could have contributed to bring the one parcel so much in advance of the other as to growth and productiveness: 1st, the setting out in the one case as soon as the vines were taken from the marsh, and the delay in the other case; 2d, the larger quantity of vines set in the one case than the other; and 3d, the second parcel were set somewhat deeper in the ground than the first. The quantity of fruit obtained the first year was three pints; the second year one peck. The quantity was somewhat diminished the last season by the cranberry worm, which attacks the fruit. The same worm, so far as I can judge, has destroyed most of the gooseberries in our gardens for several years past. It is of a green color, and about half an inch in length. Its depredations are made apparent by the premature ripening of the fruit. To prevent their multiplication, I gathered and destroyed them whenever their presence became manifest.

The vines on our marsh produced scarcely any fruit the last season. This was also the case with those growing spontaneously on the upland. The berries growing in the garden were larger than any I have seen growing wild, some of them being more than three quarters of an inch in diameter. I gathered several stems having five large berries each; I have never seen more than three on a stem in a wild state. True, the quantity of fruit produced thus far is small, and of little consequence, except as an earnest of what may be reasonably expected when the vines become established so as to cover the whole ground, which they must soon do if they continue to flourish. On the whole, I consider my experiment thus far a decided success. The vines have a beautiful healthy appearance.

Mr. Wadsworth informed me last fall that he had determined to set a new plot of considerable extent this spring. His first bed continues productive, and shows no sign of decay.

As to treatment after planting, the most that is necessary is to keep the ground clear of grass and weeds. Unless this is done nothing but failure is to be expected. This necessity prevents (in a measure) the vines from taking root as they extend in length, as they would do like strawberry vines, if they could be left undisturbed by the process of weeding. I left off weeding mine too early in the autumn of the first year, under the impression that it was too late for weeds and grass to make any considerable growth. But in the spring I found the ground nearly turfed over between the rows, and it was a serious job to clean them out. The process of cleaning left a depression between the rows, and as dry weather came on, the ground became a little too hard to admit of pulling the weeds easily. To remedy this inconvenience I put fine muck between the rows, and dug it into the soil with a transplanting trowel. This filled up the depressions, and made the ground very light and easy to work. I believe sawdust or sand would do very well as a substitute for the muck; I found it best to pull the weeds at least as often as once a week, and this spring the bed is as clean as could be desired. I expect after this year, there will be but little if any trouble with weeds. Mr. Wadsworth informs me that no weeds could grow in his vines since they became matted. This may be expected usually to take three or four years from the first start.

Last year we had twenty-nine days, commencing I think about the 12th of June, with no rain to speak of, except a slight shower—which did not wet down more than half an inch in the garden—on the 3d of July. This included the hottest term of the season, and I found it necessary to resort to the watering-pot to save our garden vegetables, for the last ten or twelve days of this season of drought. Though the cranberry vines showed no symptoms of withering, as it was their time of blossoming and setting fruit, I gave them a sprinkling with the rest. This is the only time I have applied any water to them. I have no doubt water would be good for them at any time when grass lands are in want of rain. Those whose buildings are supplied with running water might do well to select a location,

where, after the vines become established, the waste water might be applied to them at pleasure. Still, I am satisfied the cranberry will grow and flourish without any water, except as it falls from the clouds, and is deposited by dews, on any soil that is suitable for potatoes. Other things being equal, I should prefer a soil as moist as will conveniently admit of tillage.

Where vines cannot be cheaply obtained in abundance, single stems bent in the form of an ox-bow, the middle being set a few inches in the ground, would doubtless answer; but a longer time would be required to get the ground covered with vines, than by planting a tuft with their roots.

My opinion is that the soil should be at least moderately rich. My reason for this belief is, that I have seen vines that came in spontaneously on wet upland, that was too poor to bear grass, and likewise vines that have been propagated in poor, swampy land by sod planting; but they have never borne much fruit. I might also add, that in a lumber path across a marsh where cranberry vines grew, the vines manured by the teams during the winter, were productive, while on the remainder of the marsh they were barren. —*The Homestead.*

### Landscape Gardening.

We have received a small pamphlet on landscape gardening and thorough draining, by Charles Follen and H. J. Shedd, from which we quote the following remarks in relation to selecting a site for a house. The road-governing principle prevails to an almost unlimited extent here at the West. Scarcely a home is built without reference to how it will look from the road; and what people will think of it is of more consequence to the architect than how it will, by position and surroundings, enhance the comfort and happiness of those within it.

Mr. Follen says: "Sometimes a man lays out his grounds without thinking at all of where he shall put his house. Usually, however, he goes so far right as to fix upon a building place. Now this place he selects mainly with reference to the public road; and he then proceeds to lay out his grounds also with reference to the said road. In short, the whole place is made not to be looked from, but to be looked at. It is astonishing what inconveniences men, not otherwise remarkable for their self-denial, will submit to, in order to present what they consider a good appearance from the street. Often the best aspect is occupied by the kitchen-yard, the stable and out-houses, while the family, from a forlorn, sunless drawing-room perched in the air, in order that the house may look imposing to passers by, peer through their scattered trees over the dusty road at their neighbors' houses built like their own, in strict observance of this hideous architectural etiquette. Now if such a man would only stop and think of how very, very little importance it is to the rest of the world where or how he builds his house or arranges his grounds, and, on the other hand, how all important it is to himself, he might avoid that fruitful source of irretrievable mischief—the false point of view."

After giving directions about the location of buildings, the views to be regarded, the soil, the selection, planting, and grouping of the shrubbery, he says of the effects most desirable to be produced:

"The two most important ideas to keep in mind are simplicity and concentration. This need not interfere with that intricacy so effective in large and highly finished grounds; but the refinements must come gradually,—the broad principles first. We will suppose that, in building our house, we have avoided some of the common errors, and that we have placed the room where we are to live, the windows where we really mean to sit on the side where we get our most desirable view. If an ornamental terrace here connects us with our grounds, so much the better; but we need not be dependent on the existence of this feature. Better have no vestige of it than the odious expanse of road which is often made to take its place. We may consider the view from our principal window as divided into foreground and background, of which we can control the first, and, by means of it, modify the second. The foreground must be our lawn. Now, just as a sheet of water depends for beauty on the broken and varied lines of its shore, so does the lawn depend on the outline of its enclosing plantations. It is most important to keep this distinctly in mind. The consequence of neglecting it is that common spotty effect where lawn and plantation get thoroughly mixed together, to the total sacrifice of the landscape. To make this outline picturesque and beautiful our materials are the various forms and colors of our trees. We are not, however left to the exercise of our unlimited fancy. A moment's thought will show us that the landscape will, like everything else, derive beauty from its limitations. Looking at the unobstructed view, we see at once that some portions of it are much less attractive than others—probably that some are highly objectionable. These our

plantations must conceal; and we shall find that, as part of the prospect is shut out, the remainder will be enhanced. In the composition of plantations, though it is clear that true variety is desirable, yet it is also certain that the nervous attempts to avoid monotony are a common cause of failure. On the other hand, few effects are more satisfactory, more unwearied than a continuous mass of overgreen deeply indented by bright green lawn, and forming a background for fine specimens of oak, maple, and tulip trees, dressed in their autumnal hues. Yet how few elements are needed to produce this magnificent chord of color! For most cases, the safe and general rule is to avoid too many kinds of large trees, to keep similar foliage together in grand, quiet masses, to reserve strong effects of contrast for the outskirts of plantations, and to admit more and more variety and mixture of species as we use smaller trees and shrubs."

### HORTICULTURAL NOTES.

#### Pie Plant.

If you wish your pie-plant to send up good, thrifty, tender leaf-stems, cut off the flower stalks as soon as they appear. If left to grow, the strength of the plant all runs into them to develop the blossoms and mature the seed, whereas, if kept down, young and tender leaf-stalks will be springing up all through the season.

#### Dicentra vs. Delytra.

Florists and botanists have been having some discussion about the proper name for the Chinese plant known as the Delytra Spectabilis, and have finally decided that the true name is Dicentra. It is one of the most beautiful early spring flowering plants we have, has proved itself perfectly hardy in our western climate, and is easily propagated by layers or cuttings or divisions of the root.

#### Watering Dahlias.

An experienced floriculturist says of dahlias, "The watering should be effectual, and no oftener than is absolutely requisite; it should be done after the sun is down, and all over the foliage, as well as all over the piece of ground they occupy, soaking it as completely as if it were a heavy rain, and not repeating it afterwards for days. The plan of watering at the root of the plant and no where else, is altogether bad; it leads to sudden alternations of wet and dry, causes insects to be more abundant, and in a very dry season gives a check which the plant feels the whole season, or at least till the longer and more dewy nights of autumn come to their aid."

#### Fuchsias.

One of the most important considerations, and which must receive particular attention, is the proper preparation of the compost in which to grow the plants; for if the radical condition of a plant be at fault, no future treatment, however consistent, will produce the desired result. Soil that has been at least twelve months in the compost ground, frequently turned over during frost, and, if turfy, broken into lumps as small as almonds, is the material best suited for all plants. To have the finest specimens in flower in May, cuttings are taken at the end of July or beginning of August, from growing shoots, which have no flowers or flower buds on them: the points are best. These are inserted in rather light sandy material, in thumb-pots, clean and well drained, and the pots plunged, near the glass, in a frame, with a gentle bottom heat. They are shaded, and occasionally sprinkled, in the afternoon, in hot weather. When rooted, the plants are removed to a cooler situation, but are kept growing, and repotted as they need it, until they are in six-inch pots, in which they are wintered. The soil used is equal parts of rough loam, peat, well decomposed leaf mould, and about one-sixth silver sand. A moderate supply of water, during the dull months, and the usual temperature of the greenhouse, is all that they require. The side shoots are duly stopped as they proceed in growth. They receive their final shift into thirteen-inch pots, about the first week in February, using the above compost, with the addition of some rough charcoal, and are exposed to a temperature of from sixty to seventy degrees by day, and fifty by night, with shade in clear weather. They are frequently syringed with soft water, and after the plants have begun to grow rapidly, manure water is applied twice a week. Stopping is not practised later than the second week in March. The pots are plunged in tan, with a gentle bottom heat. One central support is all that is needed. Greenfly is kept down by fumigation. The plants are removed into a cold house as they are coming into bloom. Fuchsias should never be drawn by heat; they then grow too long jointed.—*Horticulturist.*

#### Rendering Barren Fruit Trees Fertile.

It fell to my lot some ten years ago to take charge of some barren old pear-trees, with long spurs full of cankers. Although I took a different course from the one you have lately been advocating to render them fertile, I have the satisfaction of observing that all the old attacks are well filled with bearing wood. The horizontal branches were all cut off, and a graft or two put in the stumps or short arms, except in some places where buds were inserted and allowed to replace the branch; those put on in the shape of buds made less wood than the others, but are very productive. The trees first grafted have nearly covered show that it would have been a mistake, where there is a great consumption of winter fruit, to have torn up the old trees and planted young ones. In the latter case I should have

the walls; they bore fruit freely on the second year's growth, and the year after the produce became greater. I allude to this to had to wait long and patiently for the first fruit bud, (unless root pruning had been resorted to,) while now I have plenty of growth and abundance of fruit. I think grafted trees will continue longer in bearing than if buds had been inserted in branches. I may mention another fact not a little interesting. Last spring a Barbarossa vine produced bunches somewhat irregular, leaving more space without fruit than I liked to see. I took a shoot from its neighbor, a Hamburg, with a bunch just coming into flower, inarched it, and put a small bottle of water to the end of it. This was done merely as an experiment, but to my astonishment every flower became a berry. The bunch progressed, and was to every one here a curiosity; it colored well, and became a compact little bunch in September.—*THORP PERROW, in Gardener's Chronicle.*

#### Vermin in Gardens.

Do not kill or drive away the frogs or toads that may be found in your gardens, unless you desire to encourage caterpillars, snails, slugs and a variety of other troublesome and destructive insects. Some gardeners take pains to place bricks or stones in such a way that they will form a refuge for toads in parts of the ground most infested by vermin. They do the work quite as well as chickens, and with no danger of damage to plants and vegetables.

#### Culture of the Tomato.

A writer in the *Cottage Gardener* gives the following timely hints with regard to cultivating the tomato so as to produce the most perfect fruit. The usual custom is, to let the vines grow sprawling over the ground, multiplying upon each other, and gathering dampness and mildew upon the fruit, by which much is entirely lost, and the remainder grown so imperfect, crooked, and full of seams as to give great trouble to the cook in preparing it for the table.

"The situation proper for the Tomato has, perhaps, more to do with its success than the soil. Against a well facing the south, is, undoubtedly, the best one for it; and it is commonly planted against any vacant space amongst the fruit trees, and sometimes, to the detriment of the latter. This should not be, especially as the Tomato will grow where trees of any size will not. Against a low wall, or wooden paling, they often do very well; and, in fine seasons, they ripen very well in the open border, tied up something like the Dahlia. That they are not so early this way, as against a wall, may reasonably be expected; but fine, well-ripened fruit, are often produced before frost sets in. Where great quantities are wanted, and wall-spaces scarce and otherwise employed, plant a few plants on a south border; and if the season, more especially the autumn, be a fine, dry one, it is likely the produce may be very satisfactory."

During the period of its growth, stopping rampant shoots will encourage the flowering-buds and promote its fruitfulness; but the plant must be allowed a little time to exhaust its superabundant vigor before it is too closely snubbed in; and after that, stop as often as you like. Generally three or four main stems may be trained up,—say a yard high, or so, and the laterals from them produce the fruit—other considerations being favorable. The soil most suitable for the Tomato cannot well be too dry; and, I believe, if it never rained during the whole summer, they would not take any harm. In fact, it is the superabundance of moisture that is so fatal to their fruitfulness. Stiff, retentive clays only prolong the growing season beyond the proper time; while a shallow soil, that can be reached by the sun's rays, is the one most suitable for this tropical plant; and plenty of stones, and other opening material, seem to be best for its roots to ramble in.

It is needless mentioning varieties, as the common large red one is the kind generally grown; but there is a yellow one, which some admire, and there is a small red, said to exceed the large one in flavor, or some other quality; but the first-named is the more useful. It is proper here to observe, that seeds of this ought to be saved only from the largest fruit; and if they are not to send to any distance, and only for home use, they keep well in dry sand, the pulp decaying during the winter.—Damaged fruit (if large) will do as well as any; and a small flower-pot will contain seeds sufficient for most ordinary growers, no washing or dressing being required. I know from experience the seeds grow better; but they are much harder than they are generally supposed to be; for I have known decayed fruit, rotted on the ground, send up quantities of plants the ensuing season. I have known these self-sown plants ripen fruit, too, the same year; but the quantity, of course, was not so great as those forwarded by artificial means. I mention it here to prove that, after all, the ripening of the Tomato, in favourable seasons, is not a difficult affair. In adverse seasons, with a cold, stiff soil, and moist or late situation, some of the plans mentioned above must be put in requisition; but even then the result will not be so favorable as when sun and dry weather will do the work."



## FOREIGN AGRICULTURE.

## Straw and Its Waste—Its Worth per Acre.

BY J. J. MECHI, OF Tiptree Hall, England.

SIR—This is a vital question for agriculture. For many years I have been gradually more and more convinced that straw has a considerable value for feeding purposes, for which alone it should be used, in order to extract from it the largest profit.

It is true that, when I have propounded this notion in the presence of practical farmers, their shouts of laughter have testified to their disbelief; and I have smiled at their prejudice and miscalculation, in conscious conviction that they would gradually have to surrender at discretion.

The quantity of wheat straw removed from an acre of well-farmed clay, where the average is 40 bushels per acre, would be 2 tons per acre. Science has shown us that, plowed in and considered as manure, its worth is but \$2.24 per ton; while, used as food, it will, if properly prepared, realize a value of \$10.00 per ton. Now what farmer would knowingly throw away \$10 to \$15 per acre, in so economic a business as farming? and yet, this is literally being done over millions of acres.

It is denied that straw has a greater value as food than as manure, it would, by parity of reasoning, be desirable to compare the manure and feeding values of oilcake, barley, beans, peas, hay, and roots.

Whilst my farming friends ridicule my dislike to plowing in straw, they would stand aghast at my proposing to them to plow in their barley-meal, linseed-cake, or other feeding material. But I can see no difference: the folly or error is in each case equal, and the loss comparatively as great.

Whence does this singular disbelief arise? Simply because the straw, in an unprepared condition, is not in an available condition as food.

I purpose to give a practical illustration of this question, by a statement of my own proceedings; but every one who would understand the question in its most comprehensive view, should study Mr. Horsfall's admirable papers on dairy management, in the Society's Journal. The whole feeding question may be considered as greatly developed by those papers.

The question of converting both our straw and our roots more advantageously than we now do, is a true breeches-pocket question for the British farmer; nor are the public less interested in the more abundant supply of meat, which would naturally follow the more economic use of our straw and roots.

The general appearance of thriving animals is unmistakable. If, after feeding, they lie down contentedly, free from restlessness, all goes on well. Such is the case with my 10 young shorthorn bullocks, of Irish breed, about 30 months old, which were bought in at \$45 each, in 1858.

They consume daily—  
216 gallons cut wheat straw..... \$0 60  
3 do rape-cake..... 0 09  
3 do malt-combs..... 0 10  
5 do bran..... 0 10  
Molassed by  
20 gallons of hot water (bean straw requires twice the quantity)..... 0 64

In round numbers, they cost at the rate of \$0.84 per week, independent of the wheat-straw. If I value the wheat straw at \$10.00 per ton, it would add \$0.60 to their weekly cost. The roots I value at \$2.50 per ton.—The animals are in a fattening and growing condition, and evidently are advancing remuneratively. This we can judge of by their appearance, as I have not, like Mr. Horsfall, a weighing-machine for cattle. Nothing tests the value or force of food so soon as milking cows. I strictly adhere to Mr. Horsfall's proportions of food for mine; and the result is an ample supply of milk, and an increase in condition.

The food for each cow is as follows, daily: 20 lbs. straw chaff; 8 lbs. of hay; 5 lbs. rape-cake; 2 lbs. bean meal; 3 lbs. bran; 3 lbs. malt-combs; 35 lbs. mangel or Swedes. Cost (without straw,) \$1.82 per week.

The whole question may be said to hinge upon the condition in which the food is administered. It must be moist and warm; and the animals must have proper warmth and shelter. As a general rule, this is not the case throughout the kingdom: hence much food is wasted or misapplied. Were I to give my bullocks the same quantity of cut straw in a dry state, they would not eat one-half of it; and, besides, they would be restless and dissatisfied. This I know from experience.

I will now describe my mode of preparation, and calculate the cost.

I do not use the ordinary close steaming apparatus, but a number of cast iron pans, or coppers, each capable of containing 250 gal-

lons. These are set in brick-work, with a 4-inch space around them, each space connected with the adjoining one by a 6-inch earthen pipe.

Into these spaces, and around these coppers, circulates a portion of the waste steam from the engine, after having passed through the cylinder.

I should state that a close vessel of water, connected with the supply tank, is kept in a nearly boiling state by the waste steam before it passes around the coppers, and a vertical four-inch pipe takes away the steam after it has passed around the coppers, after heating the close vessel of water, and then passes into the atmosphere.

The coppers are all sunk into the earth, so as to stand level with the floor. By this means, when an extra supply of food is required, it may be piled up in a mound, and kept hot for two or three days.

The straw, cut fine and sifted, is thrown into the copper, twenty-seven gallons at a time, and then the proportion of malt combs, bran, and rape-cake strewed over it; then a pail of hot water (drawn from the hot water vessel close at hand) is thrown over it, and it is all incorporated by mixing with a steel fork, and well trodden down; then another twenty-seven gallons of chaff, with the other materials and hot water; another mixing and another treading down, until the copper is full and solid; and if extra quantities are required, it may be continued in the same way above and around the coppers, but it must be moist and solid (if too wet the animals will not eat it.) The larger the mass, the longer it remains hot.

Practically, we can in winter manage if our engine only goes twice a week; but as a general rule we work it for grinding, irrigating, thrashing, &c., more often than that. The mass of subterranean brick-work absorbs the heat from the waste steam, and holds it for several days.

The heat so obtained costs you nothing, for it would be wasted in the atmosphere.

I think the time will come when farmers will turn it to several useful purposes.

Animals will eat rape-cake abundantly when so mixed and dissolved, but not when dry.

This is an admirable food for all sorts of farm animals, and it should be administered, more or less, through the whole year.

I should say that our roots are cut either by a Gardner or Bentall, and mixed in the manger with the warm steamed chaff. There will be no blowing, griping, or scouring with food so prepared, and the animals eat it as hot as they can bear it.

In my earlier career, I reared first forty and then fifty calves, and sold them as fat bullocks, so treated, never having been off the boarded floors for two and a half years, and never having had straw under them.

The ten bullocks I am now feeding are on sparred floors.

The cost of cutting a ton of straw into chaff, one-fourth of an inch long, may be taken at 72 to 96 cents. The trials of chaff-cutters, as reported by the judges in the Royal Agricultural Society's Journal, show that 112 lbs. or more of hay could be cut in three minutes by steam power. It would be well, however, to double that time or cost, because we know on such occasions that everything is in "competing order," which could not be expected on a farm. Therefore, 48 cents a ton for hay, or 96 cents per ton for straw, would be a liberal cutting-up, allowance by steam power.

If we are to consume all our bean, barley, wheat, and oat straw, we must keep our animals on sparred floors, or on burned clay, and we must invest more capital in animals, and shall make much more meat per acre. If a ton of straw will make 30 lbs. of meat, and if two tons of straw are grown per acre on our cereal and pulse crops, it would be four score of meat per acre over the whole of the cereals and pulse.

Oh! but where is your manure to come from, if you eat your straw?

Why your animal, by this mode of feeding, consumes 560 lbs. of rape-cake with every ton of straw. This is better than littering the yards by cart loads in wet weather, to sop up the water, and save some of the liquid manure which would otherwise be washed away by rain from untroughed roofs.

But what feeding property is their straw?

A good deal of hilarity was excited at our London Farmers' Club the other day, by my stating that every 100 lbs. of wheat straw, contained the equivalent of 15 lbs. of oil.—Since then, I find I have understated the case, and that really each 100 lbs. of straw contains—see Morton's admirable Cyclopaedia, vol. ii., page 1153 (Voelcker's analysis)—seventy-two per cent. of muscle fat and heat-producing substances, of which twenty-seven per cent. are soluble in potash, and thirty-five per cent. insoluble.

The soluble fattening substances are equal

to 18½ lbs. of oil in each 100 lbs. of straw.

In conclusion, I would recommend every feeder of stock to study Mr. Horsfall's papers in vol. xvii., page 260, and vol. xviii., page 150 of the Royal Agricultural Society's Journal. They will enlighten his mind, dispel his prejudices, and increase his profit.

By Mr. Horsfall's mode of feeding you may get the manure without cost, and a handsome price for your straw and roots.

The following facts, deduced from Mr. Horsfall's paper, will show that 1,000 lbs. of swedish turnips, or 100 lbs. dry are worth, 43½ as manure, whilst

100 lbs. of hay are worth.....	\$0 28½
100 lbs. of straw.....	0 10
100 lbs. of bean meal.....	0 60
100 lbs. of oilcake.....	0 75
100 lbs. of Indian meal.....	0 25½
100 lbs. of locust beans.....	0 10

Here is an instructive and interesting comparison with a vengeance! A ton of Swedish turnips are worth, as manure, 96 cents per ton, or nearly half the manurial value of a ton of straw or locust beans.

Oilcake or rape-cake are worth, as manure, \$15.12 per ton.

If by his system of feeding 14 lbs. per week of meat and 3 lbs. of internal fat can be gained by each full-sized animal (and I am sure this can be done as an average,) I know of no other system which will exceed it in result, or equal it in economy.

The consumption of straw, in the way here suggested, would produce a very great increase of meat, manure, and corn.

If supplies of this warm food were conveyed to sheep in our field in cold and miserable weather, many losses would be avoided, and our turnips would make more mutton.

In order to provoke a discussion and examination of this subject, I send this communication to several papers, and shall probably enlarge upon it in some future paper.

## Clearing and Improving Marshes.

The subject of reclaiming swamps by surface and underdraining, has recently been alluded to in our columns, and we now propose to offer a few hints on the best method of clearing bogs and marshes, and of bringing the same into a permanently productive state. In most parts of the country such land is to be found in considerable quantities; hence we need no excuse for bringing the subject repeatedly before our readers.

Some few years since, an eastern Ag. Society offered several premiums, extending thro' a course of years, for experiments in clearing and improving marshes, and afterwards reported at some length thereon. It is interesting as showing the cost of bringing boggy marshes into cultivation, and also as presenting the views of practical and well informed men on the best means of accomplishing the same.

As to clearing, after a careful examination for several successive seasons, of the half-score of entries of lands, the committee came to the conclusion that the most effectual and thorough process on very wet soils, with a vegetation of small bushes and coarse grasses, was,

1st. To thoroughly drain the land, as far as it could be done by frequent ditches; and  
2d. To float or cut off the whole surface of the ground, and piling it in winrows, let it dry, and then burn the whole to ashes.

This method taking all things into account, they believed to be more economical than that generally practiced, of cutting off the bogs and brush, and then subduing the coarse vegetation by frequent plowings and harrowings. It was found exceedingly difficult to reclaim the soil from its original products by the latter process. By paring and burning, on the contrary, the coarser materials of the land were at once reduced by fire, and afforded a valuable and much needed amendment, in their abundant ashes. The surface, with slightly plowing or thoroughly harrowing, was much earlier prepared for a crop than by the other method, gaining one or two years out of three or four, in the use and production of the land, over that of subduing by the plow.

In a number of examples given, the cost of clearing and thoroughly subduing by this process was about \$20 per acre. The crops for three years paid all expenses and more, and the land would remain equally productive for a long time, with proper treatment.

If a marsh has much depth of muck and cannot be drained thoroughly, we find that after a few years it will settle down nearer the water line, and in the moister spots wild grasses will displace the cultivated ones. If an outlet can be had, the most efficient remedy will be to deepen the drains, plow up and reseed to grass, and if at the same time, a top dressing of sandy loam be applied, the results will be more satisfactory. The grass will have a better character than on muck alone, and will be less likely to become "run out" by coarser herbage.—Country Gent.

## FARM MISCELLANEA.

## Lands taken under the Homestead Laws.

Since the State Homestead Law went into operation, on the 14th instant, 2,000 acres have been taken up by actual settlers, in lots of forty acres each, and the prospect is, that this law will be the means of bringing a large body of unoccupied land under cultivation.—So far, the land is principally taken by adjoining owners, and the greater number of locations, so far, have been made in Gratiot and other northern counties. It is the intention of the State Land Department, to insist upon the most exact compliance with the requirements of the Homestead Law.

## Sporting Item.

The great trotting match in double harness, for \$10,000, between *Ethan Allen* and *Lantern*, over the Union Course, L. I., took place Wednesday. The first heat was run in 2 minutes and 54½ seconds—the shortest time on record—and was "a dead heat." *Ethan Allen* won the race. *Lantern* did not win a single heat; two were dead heats. An enormous crowd from New York and vicinity were present, and a great deal of money changed hands.

## Culture of Corn.

There seems to be an opinion prevalent that the produce of mixed corn is apt to give a greater yield than what is obtained from seed which has been kept pure. The *Country Gentleman* relates that a Vermont farmer, planted the eight-rowed yellow, the eight-rowed white and the Red Blaze side by side for one year, and the next year selected his seed from ears which were most evenly mixed, and followed the same process the third year; when he obtained at the rate of 114 bushels of shelled corn from an acre. The corn at this time yielded but few white kernels, but was blazed at the top, the ears very long and the cob very small.

## Culture of Rape in Canada.

In the first place the land should be a rather damp deep soil rich in manure. The land is plowed in the fall very deep, and the manure is drawn on in winter. In the spring it is cross plowed and worked down to a fine tilth. About the first week in June our rape seed is sown. It is put in rows about two feet apart, the manure being put in the drills it is covered by splitting the rows. The roller is then passed over, and the seed is put in with the drill, and a pound is sown to the acre. The scarifier is passed through the rows as soon as the rough leaf appears. The more rape is worked among, the better it grows. When it is about one foot high we commence thinning out and giving to the young cattle and pigs. About the first of August, the young lambs are put on it for two or three hours at a time, allowing them plenty of salt. This crop is excellent for making mutton and growing wool.—*Practical of C. W., in Country Gentleman.*

## Sale of Shorthorns.

At the sale of Shorthorns at Mr. Taber's place on the Hudson River near Albany, New York, ten bulls, mostly yearlings brought an average of \$120 each, but one among them, an old one sired by Duke of Gloster, brought \$505, reducing the average of the remainder to about \$80. Twenty-four heifers and cows brought mostly \$100 each, some however went off at \$150 and \$200, the highest priced was \$225. This sale was attended by Messrs. Thorne, Kelly, and other well known breeders who made purchases.

## Cure for Scratches.

The other day we were at the barn of Mr. J. H. Caniff near Detroit, where we saw Cossack, a fine stallion of some notoriety. We asked Mr. Caniff if he had ever got cured of his diseased heels, and he told us he had cured them. When Cossack was brought to him, he was badly diseased. Mr. Caniff first washed his feet and legs perfectly clean, and then plastered on the diseased parts as much flowers of sulphur as they would retain. This was repeated several times until the feet got quite well. Since then this horse has not been troubled with sore heels, scratches or cracks. He looks now perfect and clean.

## Heating Value of Different Kinds of Wood.

According to the careful experiments of an eminent French chemist, the relative heating values of equal bulks or cords of several American woods, are expressed as follows:

"Shell-bark hickory being taken as the highest standard, 100; pig-nut hickory, 95; white oak, 84; white ash, 77; dog-wood, 75; scrub-oak, 73; white hazel, 72; apple-tree, 70; red oak, 69; white beech, 65; black walnut, 65; black birch, 62; yellow oak, 60; hard maple, 59; white elm, 58; red cedar, 56; wild cherry, 55; yellow pine, 54; chestnut, 52; yellow poplar, 52; butternut, 51; white birch, 48; white pine, 42. Some woods are softer and lighter than others—the harder and heavier having their fibres more densely packed together. But the same species of wood may vary in density, according to the condition of its growth. Those woods which grow in forests, or in rich wet grounds, are less consolidated than such as stand in open fields, or grow slowly upon dry barren soils.—There are two stages in the burning of wood—in the first, heat comes chiefly from flame;

in the second, from red hot coals. Soft woods are much more active in the first stage than hard, and hard woods more active in the second stage than soft. The soft woods burn with a voluminous flame, and leave but little coal; while the hard woods produce less flame, and yield a larger mass of coal.

## New Barley Insect.

Hon. George Geddes sent us some pieces of barley straw, in which there were worms from which the new barley insect described in our Journal for April, is hatched. Mr. Geddes says, "about the time the barley shows the heads, and before they are filled, the straw begins to bend over, and the crop dwindles and grows smaller until harvest. When we thrash, small pieces of the straw pass through the fanning mill and appear in the half bushel with the grain. By opening one of the pieces you will find the worms."

This worm is destroying the barley crop, and unless its ravages soon become less, we must give up this grain. Many farmers have given it up. There is an opinion among a few of our farmers, that two bushels of salt to the acre, sown just before the heads appear, is beneficial. Can so small a quantity of salt do any good?

We have sent the specimen received to Dr. Fitch. They are the same as those received from Mr. Lincklaen, and every effort will be made to endeavor to find some means of arresting the ravages of this insect. If farmers in other parts of the State have discovered the same difficulty in their barley, we should be pleased to be advised of it.—*Journal of the New York State Agricultural Society.*

## Scare Crows.

This is the time of year for our corn-fields to exhibit all sorts of artistic ingenuity, in the shape of old clothes statuary, and a very odd and expressive tableaux, as well as a great extent of never-ending twine—glittering pieces of tin hun; on poles, by ever twisting and twisting strings—old coffee pots, and dilapidated hats; all to intimidate that very sable, but sagacious bird, the crow. Mr. Crow generally laughs in his sleeve at all this expenditure of cast off toggery, and takes what corn he wants before the farmer is up, or in the house at his meals, or gone to meeting, or absent from the premises from any other cause. The best mode that we ever adopted, to keep this inveterate old poacher from pulling up our corn, was to surround him with assailants of his own kind. Make bird fight bird. We once set up a couple of martin boxes on poles in our corn field. These were occupied by families of martins; and woe fell upon every crow's poor devoted head that dared to show itself anywhere near the premises. They were out as early as Mr. Crow himself, and ready to give him battle all summer, or until their young had flown, and they got ready to migrate south. There was many a battle fought over the field, but no corn was pulled up that year.—*Maine Farmer.*

## Fall Plowing for Roots.

John Howatt, of Kentucky, says that in Great Britain, the plowing of land in the fall, that it may thus be exposed to the action of the frosts and of the atmosphere, is considered as good as seven tons of additional manure in the growth of turnip and carrot crops. If that be so in the old country, it must be much more so here, where the winter is longer and the frosts are more severe and penetrate more deeply into the soil.

## Land in the Northwest.

A correspondent of the Grand Rapids *Eagle* thus describes the country in the Northwestern part of the State, in the counties bordering on the Manistee river, and south of Grand Traverse:

"The land between the south branch of the Manistee and the main river is the richest we have seen since we left home. Some of the way the land is knobby and very rolling, but it affords a very fair location for a good road, with but a little variation from a straight line. There are no regular hills and valleys, but many high knobs, or mound shaped hills—some of them of less distance around the side than over the top. The soil is very rich, proofs of which we find in the thrifty maples and a luxuriant growth of leeks and wild flowers. Here, on this river are the largest cedar trees that I ever saw; but where the cedar grows the ground is soft and mucky, and not good for a road. The cedar trees are good for crossways, however—so Nature has made provisions equal to the demand in that respect.

There is a singular difference between the bottom lands in this State and those in Ohio, where I formerly lived. In Ohio, the river bottoms were generally level and smooth to the river bank, giving beautiful land for cultivation, and the richest in the State; but here in Michigan our river bottoms are mostly very rough, and covered with swamp-wood timber, and quite difficult to reduce to a good state of cultivation—though, there is one good feature about them: they invariably abound in good springs of water. So here, just over the river, a little above our camp, is one of the best springs I ever saw—the water boiling up through beautiful white sand."



## THE ANNUAL FAIR OF THE STATE AGRICULTURAL SOCIETY For 1859, Will be Held at Detroit, on Tuesday, Wednesday, Thursday, and Friday, October 4th, 5th, 6th and 7th.

R. F. JOHNSTONE, Secretary.

### STATE FAIRS FOR 1859.

Illinois, Freeport, Sept. 5-9.  
Vermont, Burlington, Sept. 13-16.  
Kentucky, Lexington, Sept. 13-17.  
Ohio, Zanesville, Sept. 20-23.  
Indiana, New Albany, Sept. 26-30.  
Canada West, Kingston, Sept. 27-30.  
Michigan, Detroit, Oct. 4-7.  
New York, Albany, Oct. 4-7.

### COUNTY FAIRS FOR 1859.

Macomb, Utica, Oct. 19-21, John Wright, Sec'y.  
Lenawee, Adrian, Oct. 5, 6, A. Howell, Sec'y.  
Northern Lenawee, Tecumseh, Sept. 21, 22.  
Oakland, Pontiac, Oct. 12, 13, M. W. Kelsey, Sec'y.  
St. Joseph, Contreville, Sept. 28-30, D. Oakes, Sec'y.  
Genesee, Flint, Sept. 28, 29, T. H. Rankin, Sec'y.

## MICHIGAN FARMER.

R. F. JOHNSTONE, EDITOR.

SATURDAY, MAY 28, 1859.

### The Premium List for 1859.

In this paper will be found the first installment of the premium list for 1859. The portion which we publish to day includes all the divisions which have reference to live stock. It will be seen that the whole has undergone a thorough revision, and has been rendered as perfect and complete as possible. The executive committee, though somewhat pressed for time at their meeting, gave that department of the business a full attention, and have endeavored to make the premiums offered worthy of the State, whilst they also kept in view the finances, and the position of the Society. The premiums are thrown open to all the world, for this year, and we hope by this means to induce the breeders of other states to come in here with their stock and afford us an opportunity of comparing our advances with what is going on in other states. At first it was deemed advisable to cut off all third premiums, but on a reconsideration of this matter it was decided to restore them in part, and it will be seen that they are on the list. This arrangement has rendered unnecessary any class for foreign stock of any kind.

Another point worthy of note is the fact that no animal is shut out this year from coming into competition, on account of having drawn a first premium at any previous fair. All now may come forward on their own merits, and first prize animals are at liberty, and in fact are invited to come forward and compete with each other, and with the rest of cat-tledom.

To the horse men of the State, the list of premiums presents peculiar attractions. It will be seen that two new classes have been added. One of these is intended to give the advocates of the Black Hawk and Morgan families a fair field to compete with each other, and to exhibit that class of roadsters in all their perfection. Much has been said about our opposition to the Morgan family, yet this class was made by the committee principally by our suggestion, and because whilst we were desirous of recognizing the true position and merits of this very favorite family, we deemed that it frequently either had injustice done it, or it was the cause of interfering with due justice being done to other stock.

Again, the committee recognizing the fact that considerable efforts have been made to infuse some thoroughbred blood into the horses of the State, have made a class, in which these half and three-quarter bred horses may compete. As it is from this kind of stock that the most valuable and highest priced carriage horses are raised. The importance and wisdom of encouraging this system of breeding, and placing it also on its own merits, will be recognized.

The remainder of the premium list will appear in the FARMER till completed, and it will be issued in pamphlet form as soon as the printers can get it ready.

We were in hopes to have it issued somewhat earlier, but the pressure of duties upon us has been so unexpected, that it was impossible to give it earlier attention, whilst the dearth of means, and the same financial stringency that has been felt by every farmer in this State, has forced us to abjure all help and to practice the utmost self denial, in regard to hiring assistance.

For California.—A company of fifteen gentlemen, from Corona, Shavawase county, Michigan, are now enamped in the north part of this city. They design leaving for California in a few days. Dr. Bacon is at their head.—Omaha Nebraska.

### The Crops.

Up to the present moment, the wheat fields of Michigan present a most splendid and promising appearance. In northern Michigan especially, all that we have seen have been alike in luxuriance. It now generally stands about thirty inches high and is beginning to head out. After that it will push forward with rapidity to its flowering state, when we may then watch with intense anxiety for the ravages of the fly, from which we cannot reasonably expect to escape scot free.

The oat crop is generally looking well.—most of the oat fields are green with the young grain, which has a fine appearance.

The corn crop in many places is not only up but has undergone its first hoeing. On the Agricultural College farm, the first planted was noticed to be coming up vigorously in the rows on Sunday last, the 22d. The color and appearance of the young stranger was fine, and gave indications of a lusty strength, when a little more age had enabled him to show what he could be made to do, as soon as old time decked him with a tasselled head-piece.

The potatoe crop has also been planted in many places, and is coming up. All the crops planted this season prove three to four weeks earlier than they were last year.

### Stone Plover and His Colts.

We have heard of quite a number of colts being foaled this season, sired by the celebrated Stone Plover; and Mr. Williams, his owner, writes to us that he wishes us to remind their owners of his liberal offer of premium made last year; which was that he would give fifty dollars for the best colt sired by Stone Plover foaled during the season of 1859. The exhibition of colts to be made during the State Fair of this year, and the award to be made by a committee to be appointed by the Secretary of the State Society.

In our stock Register, we published with his pedigree the bill of sale of this horse, so that all doubts as to his identity might be at once dispelled. We now publish a letter published in Porter's Spirit, which the editor of that journal endorses; and to which we can only add, that we should advise those breeders of horses who desire to get an infusion of the very best, and purest quality of thoroughbred English blood into their stock, to make use of this opportunity, as there are offers of far higher remuneration for such a horse in other localities, which his owner would be unwise to refuse, and which lead us to suppose he may not remain in this State another season.

"Looking upon every effort towards improvement in our stock of horses in any part of the country with pleasure, it is with unmingled satisfaction that a few of us here learn from a Michigander friend, of the establishing, in good quarters, near Detroit, of the English thoroughbred horse, Stone Plover. He is to be kept at Plymouth, in Wayne county, about thirty miles from the city.

"From the accounts we have received of him, and from what we know of his pedigree we cannot but congratulate the people of his adopted State upon his advent among them. It may mark an era in the history of the horse in Michigan, as important as Messenger was to the whole country. He is a bay, with black points, upwards of sixteen hands, and described as remarkable for symmetry of form, and majesty of carriage, with splendid limbs, and the points of a first-class horse to perfection. Of his pedigree, there is no doubt—we have seen the documents most satisfactorily authenticating it. It may be remembered by some of our readers, that inquiry was made, and an answer given through your columns, in regard to him, about a year since, and that your London correspondent, "Censor," noticed the fact in one of his letters.—You could then say nothing of his identity, which is now perfectly established. A better and more fashionable horse there is not in all our land—if, indeed, there be in any other.—He is by Cotherstone (son of Touchstone), out of the Wry Neck, by Slane, and was bred by Lord Spencer—foaled in 1850, and purchased in May, 1851, by Count Bathynny, who entered him as his property, and in his name, to run for the Derby at Epsom, in 1853, and in which he did actually run accordingly. In the year 1855, he was let for the stud to Thos. Williams, then of Canton, Cardiff, who afterwards, in the fall of 1856, brought him to this country, and now owns him. Having been three winters in the West, he must have become acclimated, and, from his size, is admirably calculated to elevate the stature, and fill up the form, of the stock he will be mostly used for. Michigan has not paid much attention to the Turf, and therefore his harem will not be graced by as many thoroughbred mares as could be wished. But there must be many fine trotting and road animals about Detroit, which should produce superior stock from his embraces. Detroit is justly celebrated in the trotting and pacing annals of earlier days, when the ice on its beautiful river was periodically made to curve and crack under the rapid movements of Canadian habitants' gay pony. And we may add that some of its citizens have shown commendable enterprise of late years, in their endeavors to secure im-

provement, by the purchase and introduction of horses from Long Island.

"There is one feature in Stone Plover's engagement in Michigan which is noteworthy, and having expressed some views on the subject heretofore, we cannot forbear referring to it now. It is the very reasonable price at which his services are offered—being \$25 the season. Turf men and breeders are alike interested in encouraging the increase of good animals; but the high prices at which stallions are often advertised, deter many from improving, and drive more to the employment of getters which are unfit for anything but to be knocked in the head. The introduction of such horses as Stone Plover at such fair rates, must soon work a change for the better. We hope to hear good reports of his colts in a short time, and, meanwhile, again congratulate our "wolverine" friends on the opportunity now presented them for great strides in equine improvement.

New York, April 2.

MICHIGANDER.

The Pike's Peak humbug has at length assumed the form which it should have had some months since. People are realizing that they have been taken in and done for by a set of sharpers and swindlers. We know of many good farmers in comfortable circumstances in this state, that would listen to neither rhyme nor reason, on the subject but were bound to try Pike's Peak at any or all hazards, and who started for that portion of the territories this last spring. They are now beginning to learn the truth of what was told them before they started. Pike's Peak has cost this state full as much as the whole region will be worth for the next twenty years.

### How we Sowed Carrot Seed for the Crop at the Agricultural College Farm!

Immediately next to the yard that surrounds the Boarding Hall is a very sandy knoll, and on the east side of it is a marsh, through which there has been run an under-drain. Last year there was a crop of turnips grown here. Around the border of this marsh is a strip of land from one to two rods in width, where the sand has encroached on the marsh, and which therefore affords a very mellow rich soil. The marsh itself is a complete muck hole, which will eventually be of great service to the land around it. This year, however, it has been spaded from one end to the other by the students, and the raw muck turned up to mellow for a crop of turnips.—It could not be plowed, for neither horses nor oxen could pass over it. The strip of land around the marsh is that which has been used for carrots, in part, and the sandy knoll is the remainder. The whole of the piece when plowed up was found full of grubs and roots, and there are both standing trees and stumps on the sandy knoll. Both pieces were first plowed on the 21st of May, and on the 24th a yoke of oxen with a heavy triangular drag, with teeth six inches on the under side, was put on to tear up the soil and break up the roots; one hand followed, picking up the grubs and piling them up. When this was done, a new iron wheel cultivator, made by Messrs. Moir & Hunter, of Northville, was tried in this piece of land for the purpose of mellowing still further what the heavy drag had left. This implement, which was worked with a pair of oxen and a pair of horses, did its work admirably, and although the stumps were somewhat numerous in the piece, it was worked around them with little trouble, as it runs on three wheels, the forward one being on a pivot. This implement was followed with a fine tooth harrow, and finally the whole piece was rolled. This series of operations had the effect of making the soil, both portions of which were light, and too loose for good cultivation, compact and firm. That portion which was next the marsh, and upon which previously the cattle sank half way up the leg, became so firm that they walked firmly over it. The sandy knoll also became so closely compacted that it seemed to have twice the substance it had previously. Even after the treatment there was still a very large amount of small roots and pieces of sod that were not only unsightly, but would of course prove an impediment to the cultivation of the carrot. To get rid of these, two students commenced at one side of the piece, and hand raked the whole length that it was deemed proper to make the rows; as soon as this was done, a line was stretched along, and two more commenced and continued to mark out the rows with hoes, and to move the line as fast as required; the distance between each row being twenty-five inches. This distance was selected because it may be deemed most economical to work between the rows with a horse hoe, if one can be found that will be suitable. One student then followed, sowing the seed by hand, and another covered the rows as fast as it was sown. In this way, in nine hours' time, at least half an acre was completely finished in the most workmanlike manner.

The seed used was of the large white Bel-

gian variety, and of the Long Orange. It was put in water to steep for thirty-six hours, and then mixed with dry fine sand just previous to sowing. In this way it was found that a quarter of a pound was sufficient seed for half an acre. How the crop will turn out, we cannot say, but so far the work has been done, and we think is done well, considering the rough ground and the little time for preparation that has been afforded this season.—Had it been deemed advisable to spare the teams from other more important work, a large amount of manure ought to have gone upon the sand knoll with some of the adjacent muck, but this work should have been done at an earlier date, and when the tearing up of rough, unbroken corn and potato ground was less pressing. Of the result of the treatment, and of the further culture of this crop we shall notify our readers from time to time. We have here a piece of the same kind of ground reserved for a trial of mangel wurtzel, and which probably will be sown during the present week. Next to these roots will come the rutabaga crop, for which some preparations are being made now by burning and logging a river flat.

### Scientific Intelligence.

*Agricultural Patents issued for the Week ending May 2d, 1859.*—Clark Lane Hamilton, O. Horse power. G. W. Richardson, Grayville, Ill. Seeding machine. J. W. Goodale, East Wallingford, Vt. Steam spading machine. These machines are designed to operate on a large scale, and to supersede the use of the steam plows recently introduced.

T. G. Gleason, Rochester, N. Y. Cleaning grain. Henry Marallus, Amsterdam, N. Y. Harvester. W. P. Miller, Marysville, Cal. Propelling plow. S. Shinn, Philadelphia, Penn. Corn and cob cutter. J. D. Smith, Lancaster, Ohio. Harvesting machine. A. W. Wood, Hoosick Falls, N. Y. Harvesting machine.

*Agricultural Patents issued for the Week ending May 10th, 1859.*—Milton Alden, Auburn, N. Y. Cultivator.

L. F. Bingham & N. O. Pierce, Chicago, Ill. Corn planter. A. W. Brinkerhoff, Upper Sandusky, O. Corn planter. C. M. Bryan, Wright, Mo. Plow. This is an improvement in the manner of attaching the mold board to the plow, of which the *Scientific American* remarks:—

"Some plows have reversible moldboards, and a share at each end, so that both may be displaced by reversing the moldboard, and the new one put in its place. This invention is an improvement on such plows, and consists in the peculiar arrangement of the parts, or the method of attaching or applying the moldboard to the plow, whereby the moldboard may be readily adjusted on the plow, and at the same time firmly secured to it, so as to prevent the possibility of the casual movement of the moldboard."

S. V. Essick, Moultrie, Ohio. Machine for loading hay. T. J. Burrall, Geneva, N. Y. Machine for sowing fertilizers.

J. B. Crist, Evansville, Ind. Grain separator. E. Davidson, Batesville, Ark. Plow. W. C. Doss, Lavaca, Texas. Cultivator. Stephen Elliott, Richmond, Ind. Straw cutter. D. S. Fisher, Mauckport, Ind. Seed planter. J. H. French, Syracuse, N. Y. Harrow. R. B. Gilbert, Southerland Springs, Texas. Corn planters.

S. E. Hartwell, New York City. Corn planter. S. Henry, Chenoa, Ill. Seeding machine. M. G. Hubbard, Penn Yan, N. Y. Harvesters. J. C. Moultrap, Ohio. Plow. W. Nichols, Georgia. Plow.

I. B. Palamontain, Tarboro', N. C. Cultivator. G. S. Reynolds, East Bethel, Vt. Horse hay rake. D. M. Smith, Springfield, Ind. Seed planter. S. Thomas, Burnett, Wis. Harvesting Machine. G. W. Toleman, Augusta, Ky. Rotary harrow. E. Van Camp, Beadington, N. J. Hillside plows. J. Vaughn, Magnolia, Ill. Grain separator. M. Willard and R. Ross, Vergennes, Vt. Harvester. W. H. Wilson, Denton, Md. Harvester.

T. J. De Yampert, Shohola, Penn. Plow. This plow is provided with a rotary share which facilitates its motion through the land, and more thoroughly breaks up the soil.

G. G. Belcher, Worcester, Mass. Pruning knife. The object of this invention is to make the blade of the knife perfectly rigid with the handle when the knife is opened, and at the same time it is so arranged that it can be opened and shut quite easily without any danger of cutting the fingers.

W. H. King, Charleston, Ill. Corn planter. J. B. Marlon, Hightstown, N. J. Machine for digging and gathering potatoes.

Among the patents recently issued, we notice one to Capt. S. Dustin, of Detroit, for a low water alarm for steam boilers.

Of the business connected with the Patent Office Department, the *Scientific American* remarks: "We may safely presume that there never were so many patents issued from any Patent Bureau in the world in one week, to the clients of a single solicitor, as were issued to ours during the past, ending May 10, and which will be found as above. Out of the number issued, thirty-two of the cases were prepared at the home office of the *Scientific American*, exclusive of a number which were solicited through our branch office at Washington."

*Self-Ruling Envelopes.*—Mr. G. F. Nesbitt, of New York city, the Government contractor for the supply of stamped envelopes, has introduced a new envelope into the market, which is at once convenient and simple.—The novelty consists in the combination of black lines with the under wing of the envelope in such a way as to be concealed from the observation by the side wings, except when the face and back are pressed together to receive the superscription. The millions of people who are accustomed to write on ruled paper will find it an inestimable gain in the appearance of their addresses on envelopes.

### General News.

*The Quickest Trip.*—The Vanderbilt, which arrived at New York on Saturday, made the quickest transatlantic trip on record—her time being nine days, nine hours and twenty-six minutes; distance 8,115 miles.

*Michigan Southern Steamers.*—The Buffalo Commercial is informed that the Michigan Southern line of steamers will be run commencing the first of June.

*The Advertiser of this city does not believe it.*

*The Funeral of Humboldt.*—The funeral of Alexander Von Humboldt took place on the 10th inst. All that represents science, art and intelligence in Berlin joined in the procession. Three chamberlains in gold costume, bearing the orders of the illustrious deceased, preceded the funeral car, which was drawn by six horses from the Royal stables. Upon the car was a simple uncovered coffin of oak, adorned with flowers and laurel. On either side of the car were students bearing green palm

branches. A line of carriages of immense length closed the procession. The Prince Regent and all the Princes and Princesses assembled in the Cathedral, awaiting the arrival of the great philosopher's mortal remains. A mournful aspect overpread the whole town.

—The Emperor Napoleon III completed his 51st year on the 26th of April.

—The Empress Eugenie completed her 88d year on Wednesday, May 4th.

—Queen Victoria was 40 years old on the 24th inst.

—The Rev Mr. Stowe, and Mrs. H. B. Stowe will visit Paris in August, on a visit to their two daughters who are at school there.

—*Peterson's Detector* warns persons who are compelled to handle bank notes not to wet their thumbs while counting the notes. It remarks that if the thumb comes in contact with the tongue after handling a note from the pocket of a man infected with the small-pox, the infection is as sure to take effect as the inoculation of a child.

Some of our Michigan editors think they are as good as insured for life against the small-pox, if they don't catch it till they are caught counting over bank notes.

—A letter passed through a rural post office in Northumberland, England, not long since, bearing the following address: "For the Girl at the Heatherybank near Cow Gate near the toll near Slatford Newcastle-on-Tyne on that side of the road farthest from Kenton and near to the Bath House next to Byre joining the stable close to the cart shed and not far from the Barn and Threshing Machine."

*Camp Meeting.*—A camp meeting is to be held near Dixboro, Washtenaw county, to commence on the 10th day of June and close on the 21st.—*Ann Arbor News.*

*The War and Molasses.*—Molasses has gone up four or five cents per gallon within the last week at Portland, Me., the great depot of West India molasses, in consequence of the war news.

### Literary News.

*Remarkable Coincidence.*—Somebody has sent the editor of the Niles Inquirer a copy of Miss Mulloch's "Thoughts about Women;" and, in attempting to express his thoughts about the book, he has repeated word for word the notice we gave of it in the FARMER for Feb. 26th. As this is done without so much as "by your leave," or "thank you," we look upon it, either as a remarkable coincidence of thought and expression, or as evidence that our friend of the Inquirer has repudiated the credit system altogether. Which is it?

Charles Scribner has published the "Life of General Havelock, K. C. B." written by J. T. Headley.

Bailliere Brothers, of New York, have got out Part I. of the Complete Writings of Thomas Say, on the "Entomology of North America," edited by John L. L. Conte, M. D., with a Memoir of the author by George Ord, late President of the Academy of Natural Sciences of Philadelphia.

Two hundred thousand copies of Spurgeon's Sermons, it is said, have been sold by Sheldon & Co. of New York, the American publishers. The ninth edition of the fifth series has just been issued.

The "Recollections and Private Memoirs of Washington," by his adopted son, George Washington Parke Custis," edited by Benson J. Lossing, are shortly to be published in an illustrated 8vo. volume, by Derby & Jackson.

Among the novelties in preparation for the next publishing season is a new serial work by Mr. Thackeray. It will form the most attractive feature in a monthly periodical to be published by Messrs. Smith, Elder & Co. The publication of the "Virginians" will occupy some four months longer.

It is said that Sir E. Bulwer Lytton will make about £15,000 out of his last novel, "What Will he Do with It?" Another 5,000 edition of his two guinea four volume has been issued. Say the profit to him is only a clear half, (says the *Court Journal*), and there goes into his pocket a sum equal to his year's salary as Secretary of State.

G. P. Putnam publishes the 5th and final volume of Irving's "Life of Washington." It includes the presidential terms and closing years of Washington's life; an appendix containing the Farewell Address, with the author's revisions and corrections; an account of the various portraits of Washington, and other documents, and a copious index to the five volumes.

Mrs. Mary E. Bryan, editress of the *Atlanta Temperance Crusader*, has been elected principal of the Belles-Lettres Department in the Griffin (Ga.) Female College, and has accepted this position.

### Foreign News.

The Royal mail steamship Asia, from Liverpool, 14th, arrived the 26th inst.

Napoleon's departure from France was a perfect ovation, and the reception at Genoa, where he arrived on the 12th, was most cordial. He issued a stirring address to the army enjoining discipline, and stating his only fears were that they would show too much enthusiasm. He was expected to proceed to the army on the 14th.

The King of Sardinia visited the Emperor at Genoa.

Official—Sardinian bulletins continue to report retrograde movements by the Austrians, whose head quarters were at Rabbion.

The Sardinians had retaken their former position.

The British government formally proclaims strict neutrality and warns its subjects against violations.

The War department has issued an important notice authorizing the formation of volunteer corps throughout England.

Activity in the English dock yards is equal to that at the height of the Crimean war.

The Parliamentary elections are nearly all over. The result is as last reported.

The army of Lyons was under orders for Italy. This would raise the French troops in Italy to about 200,000.

French legislation on the corn laws is postponed sine die.

The Bank of France lost 25,000,000f. in specie during the month. The Bourse has been active and higher, but declined three-fourths on the 13th; closing at 91f. 5c.

The projected mission of Prince Windischgratz to St. Petersburg is abandoned.

The German Diet has adopted a proposition to put the Federal garrison on a war footing.

The Prussian chambers have both authorized a war loan by the government.

Advices from Turkey report increasing agitation in the provinces.



## The Household.

"She looketh well to the ways of her household, and saileth not the bread of idleness."—PROVERBS.

EDITED BY MRS. L. B. ADAMS.

### SONG FOR MAY.

BY MRS. L. B. ADAMS.

While the fresh green grass is springing,  
Starred and gemmed with countless flowers,  
And the sweet young May is bringing  
Perfume from her far-off bowers,  
While the robin's song is ringing  
Through the balmy morning hours,  
Every poet too is singing,  
Singing of the sweet May showers,  
Singing of the dawning beauty  
Of this lovely world of ours.

Hark! the blue bird's song entrancing  
From the budding orchard rings,  
While the rosy light is glancing  
From his restless azure wings.  
Poets, while the Spring advancing  
Thus her cheering music brings,  
O remember that to mortals  
Ye are birds without their wings.  
Poet birds, and bird-like poets,  
Each is happiest while he sings.

Then together join in chorus,  
Welcome in the smiling May;  
Bless the green buds bending o'er us,  
They'll be leaves another day;  
Bless the wind that goes before us,  
Waking beauty in our way,  
Till we dream it doth restore us  
Back to Life's sweet April day.  
Birds and poets join in chorus  
Hail the birth of blooming May.

### Industry and Education of Women.

The April number of the *Edinburgh Review* contains a very elaborate article on "Female Industry," the statistics of which are collected from various reports and works published in Great Britain within the past eight years. From the facts gathered together from many reliable sources, it appears that out of six millions of women, above twenty years of age, in Great Britain, exclusive of Ireland and the colonies, no less than half are industrial in their mode of life, and more than two millions are independent in their industry, are self-supporting, like men. And the proceedings of the new Divorce Court, and matrimonial cases before police magistrates have disclosed facts which make the thinking public open their eyes with astonishment at the amount of female industry in their midst. Almost every aggrieved wife who has sought protection, has proved that she has supported her household, and has acquired property by her effective exertions. Thus, it is being found out, slowly but surely, that women are of some use in the world, after all, and the *Review* very truly says, "This fact is one which cannot safely be made light of or neglected."

It is not the want of will or energy or ability to work that brings so many women to pauperism and crime; it is rather the lack of advantages to qualify them for appropriate spheres of usefulness, and the meagerness of the compensations that are granted them even when qualified. The last census of England gives 128,418 as the number of women over twenty years of age, engaged in agriculture, exclusive of the wives and daughters of farmers, and of that number 64,000 are dairy women whose wages average only from forty to fifty dollars a year, with board and lodging. Our *Review* says of this work, "It is much harder for women, and more injurious to health than hoeing turnips and digging potatoes. On a dairy farm the whole set of labor has to be gone through twice a day nearly the whole year round; and any one who has seen the vessels on a Cheshire farm, the width of the tubs, the capacity of the ladles, the strength of the presses, and the size of the cheeses, will feel no surprise at hearing from doctors that dairywomen constitute a special class of patients, for maladies arising from over fatigue, and insufficient rest. The professional dairywoman can usually do nothing else. She has been about the cows ever since she was tall enough to learn to milk, and her days are so filled up, that it is all she can do to keep her clothes in decent order. She drops asleep over the last stage of her work; and grows up ignorant of all knowledge, and unskilled in all other arts. Such work as this ought at least to be paid as well as the equivalent work of men; but, of the 64,000 dairywomen of Great Britain, scarcely any can secure a provision for the time when they can no longer lean over the cheese tub or churn, or carry heavy weights."

The census referred to above, shows that in 1851, there were in Great Britain, exclusive of Ireland and the colonies, 385,000 women employed in textile manufactures, such as fabrics of cotton, woolen, flax, silk, paper; 40,000 are engaged in mechanical arts, such as metal works and earthen ware, and upwards of half a million in making, mending and washing articles of dress. Here are upwards of a million of women above twenty, earning an independent living by their own indus-

try, and the *Review* justly says, "Their condition, claims, and prospects ought to be as important and interesting as those of any class of men in the community."

All these women are employed at barely living rates, so that they have no hope of a future competence to look forward to, and, what is still worse, so complete is their servitude that no time is left for their improvement in the domestic arts, and they are consequently bad housekeepers, and illy qualified for the management and training of children, defects which tell sadly upon the young who are rising up to fill their places.

In this very able and liberal paper, all the various trades, arts and occupations are pointed out in which women might be employed, profitably and advantageously to themselves and to the world, but for two great hindrances which stand in their way, both of which, however, may be overcome by patient and persevering effort on their part, combined with a broader humanity and a more philanthropic generosity on the part of the men who now monopolize those arts and trades. The jealousy of men, and the lack of education in woman to fit her to compete with them in business, are the two great obstacles in the path of her advancement, both in the old world and in the new. If women persevere in conquering the last named difficulty, the first must eventually give way to the force of circumstances. It is true, they cannot educate themselves alone, they want the aid extended to them that is given to their brothers, to make them equally competent in business, but it is only by helping themselves that they will get help. High schools, colleges and universities will never open their doors to women unless admission is demanded; but it is not alone in the lack of scholastic learning that woman's inequality lies. If she would succeed as her brother does, she must cultivate in herself the qualities that ensure his success.

In connection with the subject of education we copy the following remarks from the Report of the Rev. J. P. Norris, one of the Inspectors of Schools in England. The suggestions are as applicable here as there:

"But I much fear the chief reason that more is not done in this direction, is the very general apathy that prevails in the matter of girls' education. Why is it that, where you find three or four good boys' schools, you will find barely one efficient girls' school? Why is it that in pamphlets and speeches, and schemes of so-called national education, they are almost uniformly ignored? The reasons are two-fold: a very large number of people who are interested in the progress of education think of it only in connection with our national wealth; they mean by education the extension of skill and knowledge as essential elements of productiveness, and, therefore, with girls, schooling is a matter of little or no moment. Another still larger class of persons, who, from native illiberality of mind, are opposed to all education, though ashamed to confess this generally, do not blush to own it with respect to girls. So that on either hand the girls' school is neglected. And what is the result? For want of good schools for girls three out of four of the girls in my district are sent to miserable private schools, where they have no religious instruction, no discipline, no industrial training; they are humored in every sort of conceit, are called 'Miss Smith' and 'Miss Brown,' and go into service at fourteen or sixteen, skilled in crochet and worsted work, but unable to darn a hole or cut out a frock, hating household work, and longing to be milliners or ladies' maids. While this is called education, no wonder that people cry out that education is ruining our servants, and doing more harm than good!"

"But there are other evil results arising from the neglect of girls' education, far more serious than the want of good servants;—as the girl is so will the woman be; as the woman is, so will the home be; and as the home is, such, for good or evil, will be the character of our population. My belief is, that England will never secure the higher benefits expected to result from national education, until more attention is paid to girls' schools. No amount of mere knowledge, religious or secular, given to boys, will secure them from drunkenness or crime in after life. It may be true that knowledge is power, but knowledge is not virtue. It is in vain for us to multiply the means of instruction, and then sit down and watch the criminal returns in daily expectation of seeing in them the results of our schooling. If we wish to arrest the growth of national vice, we must go to its real seminary, the home. Instead of that thriftless untidy woman who presides over it, driving her husband to the gin palace by the discomfort of his own home, and marring for life the temper and health of her own child by her own want of sense, we must train up one who will be a cleanly careful housewife, and a patient skilful mother. Until one or two generations have been improved, we must trust mainly to our schools to effect this change in the daughters of the working classes. We must multiply over the face of the country girls' schools of a sensible and practical sort. The more enlightened women of England must come forward and take the matter into their own hands, and do for our girls what Miss Fry did for our prisoners, what Miss Carpenter has done for our reformatories, what Miss Nightingale and Miss Stanley are doing for our hospitals."

### Mary Morris and her Pupils.

#### CHAPTER III.

##### AN END OF SCHOOL DAYS.

Dr. Freeland looked upon children as beings without reason or understanding, and thought a teacher must necessarily lower his standard of intellect to their capacities; Mary Morris believed in raising them to hers; and she was right.

Dr. Freeland was a man of the world; he imagined that he understood human nature perfectly, and took great pride in expressing his unbounded contempt for its weakness; Mary Morris was a farmer's daughter, a quiet, thoughtful woman, without much experience as the world goes, but deeply read in the mysteries of children's hearts, delighting to cherish and strengthen with judicious care all that was good or noble in their natures; teaching them to shun vice for its very hideousness, and to love virtue for its own loveliness.

It was Saturday again, and Dr. Freeland was riding past the little country school-house. He had passed it regularly every day for the last two weeks. He had learned that the little pale cheeked, dark eyed Mary Morris taught school the e; he had heard that old Mr. Wisner looked upon her as little less than an angel; that 'Squire Bell blessed her as having been the means of restoring peace to his household; he had seen the happy little phebe birds and wrens and robins fluttering about under the trees, and once he had seen the mistress herself as she came out upon the porch to call them in. All this he had heard and seen; but let no one suppose for a moment that Dr. Freeland had stepped aside from his dignity to make enquiries concerning a country school teacher. No; this knowledge all came to him in a legitimately genteel way; all through his profession.

Mr. Wisner's youngest child had been taken ill; as the Doctor was passing he had been called in, and in the course of his visit there through the week, the good, garrulous old man had told him all. The school was a theme upon which he never tired. "But the Saturday meetings," he said, "where she lectures the little ones, and talks such things to 'em as I never heard on when I was a boy—I wish I had, for I might have been a better man—them Saturday meetin's is worth more'n all the book larnin' they get in the whole week besides. I've ben in to two or three of 'em myself, and, hard old case as I am, it done my heart good to see what ideas she stirred up, and what a change she'd made in them little fellers that not mor'n a year or two ago was the worst scamps in the neighborhood. It would do you good to hear her, Doctor; its wuth more to us than a sight of the preachin' we get."

The Doctor did not say how much he had heard, but his philosophy was sadly at fault to reconcile what little he did know of Mary and her teachings. As he came in sight of the school-house this morning all that he had heard came freshly across his mind, and he wondered if the young lady herself felt satisfied with such trophies of success as that wicked old ignoramus transformed into a saint, and his thick headed children moulded into paragons of perfection, which perfection and saintliness he doubted not would degenerate into vices more congenial to such natures the moment the restraining influence was removed. The more he reflected on it, the greater became his curiosity to hear another sermon from her lips; but he looked in vain at the sky to day; it was most provokingly clear and cool; there was not the shadow of an excuse for him to seek the shelter of the porch. He rode on to Mr. Wisner's to see his little patient. As he entered the house he beheld Mary herself, seated on a low chair with the dying child in her arms. The mother was walking the room and wringing her hands in anguish; John sat in the corner trying to calm his little brother who was crying bitterly in his arms, and the father was bending over Mary and bestowing his last look of love on the departing little one. It was a scene that few could witness without sympathy. The Doctor yielded to the mother's entreaties to stay with them while the child lived, though he assured her he could do it no good. She knew that, but it would be such a comfort to have him there if there should be any change for the better.

"The change is coming," said Mary in a low voice; and she bent her head, and closed her eyes to press back the tears that were filling them.

"It is, indeed," said Dr. Freeland in a voice equally subdued, as he sat clasping the little wrist, and listening to the mother's agonizing sobs and the deep groans that seemed breaking the father's heart.

When the last breath was drawn, the wrist pulseless and the heart still, Mary resigned the corpse into the arms of neighboring women who had come in, and the Doctor took

his hat and went silently from the house of death.

He was returning home late that afternoon, and musing, as was his custom of late when he passed that way, musing of Mary; wondering why with her beauty and talents and goodness, she had not been more publicly known; wondering if she could be really satisfied and contented to spend her life in such a place and in such employments. In her enumeration of "happy singing birds" had she forgotten the lark, that ambitious little warbler who was ready always to spring to the skies at the first flush of morning sunlight?

No, Doctor; nor had she forgotten that its home is on the earth, wherever its song may be sung. In truth, the lark was Mary's fittest emblem. All deep and warm affections were slumbering in her heart, ready to spring forth on their beautiful wings at the first blush of life's morning sunlight, love.—Her existence had been as quiet, calm and unvarying as a starlit summer night, in respect to the passions and emotions of her own heart; otherwise her life had been far from an idle or useless one. Her school days had been devoted to study, and the past three years to the unremitting duties of a teacher. Mary's mind was the broad, rich meadow, and from its luxuriance many hitherto starving souls had been supplied, and many refreshed by pure draughts from its gushing springs of thought; but in the centre was the lark's nest with its precious inmates yet asleep.—And had there been no effort to awaken them? Yes; more than one presumptuous meteor had flashed around, and spent its little fervor in the vain attempt to prove itself the sun; and once, the wan old moon its last quarter, put on a sickly glare and peeped into the nest. But larks never mistake meteors nor moonlight for the sun; nor, though the sun be clouded, can they be made to sleep when it has once arisen.

Mary was walking home that day; John Wisner was to have taken her in the farm wagon, but since the child's death he was obliged to go in another direction to notify relations of the funeral. But she was accustomed to the walk; many of her pleasantest summer hours had been spent in rambling along that familiar road, often accompanied by some of her pupils, but still oftener as now, alone.

She was in sight of her father's house when Dr. Freeland overtook her. He dismounted, threw the bridle reins over his arm, and walked by her side to the gate. She had been saddened by the events of the day, and conversed but little; yet there was intelligence in her eyes, and a gentle sweetness in her voice and manner which pleased the young physician, and led him to exert his powers of pleasing. Was he successful? Let Mary's heart answer. That little heart was very still for a moment the next Monday morning when, bending over the copy books on her little blue desk, she heard the clatter of horses' feet along the road; and so it was every day through the week; but on Saturday when she met him at her father's house, it fluttered fast enough, and sent the bright, tell-tale blushes to her cheeks and temples. No one at Brook farm had thought of falling ill just then for the Doctor's special benefit, but he had the manliness to make an errand of his own. He came to see Mary!

Dr. Freeland though having little personal acquaintance among the younger members of the Morris family, was, as we have said, no stranger to them. The eldest daughters had been among his playmates at the village school years before. But he had been at college and spent a year or two in traveling since then; and had, at the time of which we now speak, been for four years a successful practitioner in the town from which Brook farm was only a mile distant. Twice during the first season of his practice there, he had been called to attend upon Mr. Morris in the absence of their regular family physician.—Then he had observed the changes time had made in his former school mates; and saw also, that Mary, the little one with brown curls and dark beaming eyes, who used to come with them once a fortnight, when the boys declaimed, and the girls read compositions, was grown to be a slender, intellectual-looking girl, with the same expressive eyes, but with that wealth of hair put demurely away from her forehead and folded in shining braids around the back of her head.—This was a short time before Mary went to her school; his professional services were not again required at her father's, and he had scarcely heard or thought of her since till within the last two weeks. His curiosity was awakened by the "sermon" he had so unwittingly listened to, he was interested by what he had heard of her character, pleased with her personal charms, and, more than all this, Dr. Freeland wanted a wife. He had nearly completed his twenty-eighth year; his friends

had long been advising him to marry, and wondered why he did not. He wondered too, as he knew that such a step would give him an influence and a position among his patrons that he could not otherwise attain. There was no want of candidates on the other hand, for the young physician was handsome, popular and successful. Why he had never made a choice among all the fair ones of his acquaintance, he could hardly tell himself; and why, whether by chance or Providence or fatality, his choice was directed to Mary Morris, let wiser heads answer when our story is told.

The history of their courtship is not necessary to the sequel; it was like many other courtships which have been read and experienced; full of gallantry and the devoted tenderness of a lover on one part, and of the earnest, trusting love of a true woman on the other. Yes; the dawn had fairly come; the glowing horizon was bright with morning sunbeams; all the larks in Mary's heart were awake now, soaring toward the source of their new-born life—soaring and singing ever.

Mary was very happy that summer. Her only source of sadness was the thought of parting with her pupils; for her school would close the last of June, and as it was arranged that her marriage should take place in the fall, she would not of course commence another term. She hardly knew how deeply and tenderly she loved her little flock till she came to part with them; and even then her grief seemed less than theirs, for she was looking forward with a sweet assurance in her own heart of a happy future; but they, to what could they look forward? What assurance had they that their next teacher would not be the very opposite of what she had been, undo all that she had done, and, as little Benny said, "Make them as wicked as ever?" What assurance had they, asked George Bell, that they would ever have another teacher who would love them, and make them love each other so, or "that we shall ever be so happy again in the whole wide world?" sobbed his weeping sister Lucy.

True enough; and what assurance had Mary of her own happiness? Only the hopes of a too fond, loving and trustful heart. It was with a choking voice that John Wisner bade his beloved teacher good-bye. He thanked her for all her kindness, and told her plainly that her encouraging words had made him a man. His father was poor and could not afford to send him to school any more, as he was now in his fifteenth year, and able to be of great service at home. He intended to work for his father till he became of age, and would spend all his leisure hours in studying such books as he could get that he would be able to understand without the aid of a teacher.—He never expected to be anything great, he said; but for all that he was or ever should be, he had to thank her. "Thank one who is better and higher than I," said Mary, and placing a small Bible in his hand, she continued; "there is a book that you can always have near you; you know its Author and Teacher, call upon him often; he will teach and guide you."

She gave to each pupil some parting token of affection, and received from each some little keepsake in return. Treasures they were, though trifles, and sacredly kept for tearful reference in after years.

### Household Varieties.

**Woman's Rights Convention.**—The National Woman's Rights Convention has been in session in the city of New York. Susan B. Anthony was President, and Mrs. C. H. Hall, of Boston, Secretary.

Among the resolutions adopted were the following: that every newspaper in the land carries upon its face the record of woman's dishonor; that the dishonor of single women prevails from destitution, and that of married women from want of education and absence of purpose in life; that it is our duty to open new avocations to women, and raise their wages, &c. Mrs. Hall, Mrs. Lucretia Mott, Ernestine L. Rose, and the Rev. Antoinette L. Browne Blackwell attempted to make speeches in the course of the evening session in Mozart Hall, but were constantly interrupted by hisses, catcalls and r. w. dyism among the audience. Wendell Phillips also made an effort, but, according to reports, seems to have met no better reception than the ladies. He did, however, succeed in giving utterance to some fine things, and among them the following, which we copy for the great truth that is in them:

"If God gave woman faculties, He meant that she should use them; if she could write a word, that she should write it; if to write a play, that she should write it; if she could act it, she should do so. The highest sphere of woman is that in which she succeeds."

**The Golden Rose.**—The Pope, says a letter from Rome, recently, in accordance with annual custom, blessed what is called the golden rose. This flower, which is made of the purest gold, and ornamented with precious stones, was rubbed with balm and incense—his Holiness reciting verses explaining the mystic meaning of the benediction; after which he took it in his left hand and blessed the people. Mass was then celebrated in the Sixtine Chapel. The gold roses are ordinarily sent to female sovereigns, sometimes to princes and sometimes, though rarely, to towns' corporations. The one last year was sent to the Empress of the French, and that of the year before to the Queen of Spain.



**Lady Morgan.**—N. P. Willis, in the *Home Journal*, gives the following description of the late Lady Morgan, the celebrated English authoress: "She was a person of diminutive stature, and with either a hip complaint or some lameness of limb which she did her best to conceal; though the frisk or affected irregularity of step to which she resorted whenever she had occasion to cross a room, was always amusingly ill done. Her features were sharp, marked and merry; her eyes of a bluish gray and brilliantly alive—her 'false front' which was invariably a little askew adding a curiously expressive emphasis to her witticisms. Of taste, in all that was intended for the eye, she was a glaring violation. Her costume, and especially her head-dress, seemed always an intentional drollery. No chance observer would have taken Lady Morgan, as dressed for a dinner or evening party, for anything but an Irish washerwoman in her Sunday gear."

"Yet what completeness, aptness, elegance and polish in all which she intended for the ear!—How graceful her rejoinders, how effortless her remotest reaches of wit, how refined and well-bred her small talk and compliment! A person more universally agreeable to the most aristocratic society of the world, did not exist. All ages of persons, as well as all ranks, gave her an unvarying welcome. And she had another secret of popularity, viz: that, being wholly incapable of inspiring a tender passion, she was never engrossed by any one man to the exclusion of others. To the group of which Lady Morgan was one, every newcomer was sure to be welcome—her admirable good humor and generous kindness of her heart coming beautifully into play with this easy distributiveness."

**Mrs. Lee Hentz.**—The late Mrs. Caroline Hentz was a native of Lancaster, Mass. Her maiden name was Caroline Lee Whiting. In 1824 she married Mr. N. M. Hentz, a French gentleman, associated with Mr. Bancroft, the historian, in the conduct of a seminary at Round Hill, Northampton. He was afterwards elected Professor of Belles Lettres and Modern Languages in Chapel Hill College, North Carolina, where they removed two years after their marriage. Mrs. Hentz, jointly with her husband, subsequently had charge of seminaries in the different States of Kentucky, Ohio, Alabama and Florida. She died in Florida on the 11th of Feb. 1856, just five days after she had completed and mailed to her publisher in Boston, her last work, entitled "No Cross, No Crown."

**Noted People.**—A correspondent of the N. Y. Times thus describes some of the celebrities of England:

"Leigh Hunt is now nearly eighty years of age; and yet his complexion has the fairness and softness of youth. His hair is as white as the bloom of an almond tree, and as full and glossy as the head of a child. His brow is broad and beautiful, and his eye as gentle and as clear as that of a woman who has never seen a cloudy day. His heart is as merry as a bird's, and his look and manner alternately playful and pensive, but without a shadow of sadness."

"Mrs. Norton has been so often and so minutely described to me by one of her most devoted friends, and her handsome face had been made so familiar by paintings and engravings, that I should have recognized her among a million. Her form is tall, full and round; her complexion rich and rose-like; her teeth white; her eyes, large, lustrous and liquid; her hair dark and massive; and all over these plays a smile of most bewitching sweetness. Her conversation is brilliant and lively; and her laugh is a gush of musical inspiration. 'Time writes no wrinkles on her lovely brow.'"

"Kingslake, the author of 'Eothen,' is a small slender delicate looking man, with pleasant manners, and an easy talker. He is a member of Parliament for Bridgewater, and is hard at work on the History of the Crimean War."

#### How to Make Spruce Beer.

As the season is near when pleasant summer drinks, free from alcoholic influence, are frequently brewed by the housewife, or the well-brought-up daughters, who are taught a little of everything in the way of household duties—we append the following receipts, which are claimed to be excellent:

1. Take three gallons of water, of blood warmth, three half pints of molasses, a tablespoonful of essence of spruce, and the like quantity of ginger—mix well together, with a gill of yeast; let stand over night, and bottle in the morning. It will be in good condition to drink in twenty-four hours. It is a palatable, wholesome beverage.

2. Those who prefer mead have only to substitute honey for the molasses named above, and for one third the ginger use alsipice. Half the quantity of yeast will be found sufficient, and the bottling should occur the second day instead of the next morning. It will be fit to drink in four days after being bottled, and will keep for many weeks. A small quantity of alcohol is formed during the fermentation, and this prevents the acetous fermentation so common to spruce beer. The essence of spruce is of course left out in the making of mead. The alcohol formed from the fermentation of honey, resembles that found in *methueglin*, while the alcohol from the fermentation of molasses is *rum*. Those who imagine that they can make either spruce beer or mead without forming any alcohol, are mistaken.

3. Prepare a five or ten gallon keg, in proportion to the size of the family—draw a piece of coarse bobnet, or very coarse book muslin over the end of the faucet that is inserted into the keg, to prevent its choking, a good tight bung, and near to that a gimlet hole, with a peg to fit it tight.

**Recipe for five gallons.**—One quart of sound corn, put into the keg, with half a gallon of molasses; then fill with cold water to within two inches of the bung. Shake well, and in two or three days it will be fit for use. Bung tight.

If you want spruce flavor, add one teaspoon of essence of spruce—lemon, if lemon is preferred—ginger, or any flavor you prefer. The corn will last to make five or six brewings; when it is exhausted, renew it. When the beer passes from the vinous to the acetous fermentation, it can be corrected by adding a little more molasses and water.

This is a simple, cheap beverage, costing about three cents a gallon. After the beer becomes ripe, it ought to be kept in a cool place, to prevent it from becoming sour before it is exhausted.

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**GOOD NEWS.**—A reduction in the prices of Sewing Machines is announced in our advertising columns. Their utility is established beyond question, and at the present prices we see reason why they should not be found, as they ought to be, in every household. Several varieties are manufactured, adapted to various purposes. So far as public opinion has been formed and uttered, the preference is emphatically accorded to the Wheeler and Wilson machine for family use, and for manufactures in the same range of purpose and material. During the present autumn the trials have been numerous, and all the patents of any pretension have brought fairly into competition. In every case, the Wheeler & Wilson machine has won the highest premium. We may instance the State Fair of New York, New Jersey, Pennsylvania, Kentucky, Illinois, Wisconsin, Virginia, Michigan, Indiana, Mississippi, Missouri and California, and the Fairs in Cincinnati, Chicago, St. Louis, Baltimore, Richmond, and San Francisco. At the Fair of the St. Louis Mechanical Association, the Examining Committee was composed of twenty-five Ladies of the highest social standing, who, without a dissenting voice, awarded for the Wheeler & Wilson Machine, the highest only premium, a Silver Pitcher, valued at \$75. If these facts do not establish a reputation, we know not what can.—*Christian Advocate and Journal.*

### D. APPLETON & CO., 346 AND 348 BROADWAY, N. Y., Have Just Published, VOLUME V.—("Cham—Con.")

### OF THE NEW AMERICAN CYCLOPEDIA: A Popular Dictionary of General Knowledge.

EDITED BY  
GEORGE RIPLEY AND CHAS. A. DANA,  
Assisted by a numerous and Select Corps of Writers.

The object of THE NEW AMERICAN CYCLOPEDIA is to exhibit, in a new condensed form, the present state of human knowledge on every subject of rational inquiry in SCIENCE, ART, LITERATURE, PHILOSOPHY, RELIGION, POLITICS, AGRICULTURE, MEDICINE, BIOGRAPHY, COMMERCE, MATHEMATICS, GEOGRAPHY, MANUFACTURES, ASTRONOMY, TRAVELS, LAW, HISTORY, CHEMISTRY, MECHANICS, TRADE.

With this design, the numerous Encyclopedias, Dictionaries of special branches of study, conversations, Lexicons, in the English, French, and German languages, have, of course, been diligently consulted and compared. But the NEW AMERICAN CYCLOPEDIA is not founded on any European model; in its plan and execution it is strictly original. Many of the writers employed on this work have enriched it by their personal researches, observations and discoveries. As far as is consistent with thoroughness of research and exactness of statement, the popular method has been pursued. By condensation and condensation it has been enabled to introduce a much greater variety of subjects than is usually found in similar works, and thus to enhance the value of the NEW AMERICAN CYCLOPEDIA as a Manual of Universal Reference. At the same time an entertaining style has been aimed at, wherever it would not interfere with more important considerations. Special care has been bestowed on the department of Living Biography.

In the preparation of the present volume, nearly a hundred collaborators have assisted, including persons in almost every part of the United States, in Great Britain, and on the Continent of Europe whose names have attained an honorable distinction, each in some special branch of learning. No restriction has been imposed on them, except that of abstention from the expression of private dogmatic judgments, and from the introduction of sectarian comments, at war with the historical character of the work. In this fact, it is hoped will be found a guarantee of the impartiality and impartiality of the NEW AMERICAN CYCLOPEDIA, which the Publishers do not hesitate to say will be superior in extent, variety and exactness of information to any similar publication in the English language.

PRICE: In cloth, \$3; Library style, leather, \$3 50; half morocco, \$4; half Russia, extra, \$4 50. Five volumes have already been issued, and the remainder will be published as fast as they can be got ready.

W. M. B. HOWE, Agent for Detroit.  
Booksellers desiring to act as agents, will please address the Publishers.

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Produce and Shipping Merchants  
Agents and Consignees for the following Lines:

AMERICAN TRANSPORTATION COMPANY.  
CAPITAL \$900,000.

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AND THE NEW YORK CENTRAL R. R. CO.

We would respectfully announce to the Millers, Merchants and Manufacturers of Michigan, that the recent reduction of Canal Tolls on the Erie Canal, will enable us to carry eastward, from Detroit,

FLOUR, WHEAT, CORN, OATS, WOOL, ASHES, HIDES,

And all other products of Michigan, at prices much below those of former years. Our lines are

THE MODEL LINES OF THE COUNTRY.  
J. L. HURD & CO.,  
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### THE WILLIS' STUMP PULLER

It is the most powerful and most economical machine in use for pulling stumps, and will clear a field in less time than any other invention of a like kind.

Twenty-three stumps have been pulled with this machine in an hour and fifteen minutes. The undersigned will sell machines and rights to use and manufacture in any part of Michigan except the counties of Hillsdale, Branch, Wayne, Washtenaw, Jackson, Calhoun, Kalamazoo, Van Buren, Macomb, Genesee, Shiawassee, Saginaw, Tuscola and St. Clair, which are already sold.

All necessary information as to prices, and mode of using, will be given on application to

DAVID BLACKMAR, Ypsilanti,  
or to R. F. JOHNSTONE, Editor Michigan Farmer.

The Machines are manufactured at the Detroit Locomotive Works from the best Lake Superior Iron. [S]

**JUST RECEIVED FROM GERMANY.**  
Pure seed of the WINNINGSTADT CARLAGER and the SILVER SKINNED ONION, the finest variety for pickles known, at J. BLOSS & CO'S Seedstore, 16-4w

### 1859. SUMMER ARRANGEMENT. 1859.

### MICHIGAN SOUTHERN AND DETROIT, MONROE and TOLEDO RAIL ROAD.

ON and after Monday, April 18th, 1859, Passenger Trains will run as follows:  
Leave Detroit for Adrian and Chicago at 6.45 A.M., and 5.00 P.M.  
Arriving at Adrian at 9.57 A.M. and 10.00 P.M.  
Chicago at 7.00 P.M. and 7.00 A.M.

For Monroe, Toledo, Cleveland, Cincinnati, Buffalo and New York, Leave Detroit at 6.45 P.M. and 1.00 P.M. Arrives at Monroe at 8.35 A.M. and 4.30 P.M.  
Toledo at 9.35 A.M. and 4.30 P.M.  
Leaves Toledo at 10.15 A.M. and 5.20 P.M.  
Arrives at Cleveland at 3.10 P.M. and 9.20 P.M.

From Chicago for Detroit:  
Leaves Chicago at 6.00 A.M., 8.00 A.M. and 8.00 P.M.  
From Cleveland for Detroit:  
Leaves Cleveland at 4.00 A.M., 11.25 A.M., and 6.20 P.M.  
Toledo at 4.10 P.M., 10.35 P.M.

Trains arrive at Detroit from Chicago, Adrian, Cleveland and Toledo at 1.35 A.M., 12.15 P.M. and 7.15 P.M.

**CONNECTIONS:**  
The 6.45 A.M. Train from Detroit makes direct connection at Chicago with Express Train for Chicago and Jackson. Arriving in Chicago at 7.00 P.M., in time to connect with the Trains of all Roads running west of Chicago; and at Toledo with Express Train for Cleveland—arriving in Cleveland at 3.10 P.M., making direct connection with Express Train for Buffalo and New York; arriving in New York at 1.20 P.M., and with the Express Train for Pittsburgh.

The 1.00 P.M. Train connects at Toledo with Express Train for Cleveland, Buffalo, and New York—arriving in Cleveland at 9.20 P.M. and New York at 9.30 P.M.—next evening, and with Express Train for Pittsburgh. The 5.00 P.M. Train, connects at Adrian with Express Train for Chicago—arriving in Chicago at 7.00 A.M. The 6.20 P.M. Train from Cleveland, and 10.35 P.M. Train from Toledo, arrives in Detroit at 1.35 A.M.—Making direct connection at Detroit with Express Train on Great Western Railway for Suspension Bridge and Niagara Falls.

Direct connections are also made, at Detroit with the Detroit and Milwaukee Railway.  
Sleeping Cars accompany the Night Trains between Adrian and Chicago.  
No change of Cars between Detroit, Adrian and Chicago.

**JNO. D. CAMPBELL,**  
SUPERINTENDENT.  
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### FARMERS OF MICHIGAN!

Who want to purchase

### AGRICULTURAL TOOLS AND IMPLEMENTS!

As you would secure your own interests, get the articles manufactured by

**WATERS, LATHROP & McNAUGHTON,**  
In the City of Jackson.

Make the

**MOST DESIRABLE KINDS**  
of Farming Utensils, and the

**BEST OF THE KIND.**  
Among their manufactured articles are found the best

**Cultivators, Harrows,**  
and

**POTATO DIGGERS**  
Of different patterns, also,

**PLOWS AND ROAD SCRAPERS,**  
**STORE TRUCKS**

For Stores and Granaries. Every Storekeeper and every large Farmer want one.

**The Best Harvesters**  
In the country, and

**THRESHING MACHINES.**  
With Separators or without them. Their Harvesters are

**Allen's Combined Mower and Reaper.**  
AND

**Allen's Mowing Machine.**  
(R. L. Allen's patent, New York, with his very latest improvements.) The

**Buckeye Mower and Reaper.**  
AND

**Aultman & Miller's Mowing Machine.**  
(C. Aultman, of Canton, Ohio)

These are undoubtedly the best two Harvesters and Mowing Machines for either rough or smooth ground, wet marsh or dry meadow, and for standing or fallen grain. The farmer who uses either of these need desire nothing more in that line. Also a superior

**REVOLVING HORSE RAKE,**  
With sixteen teeth, being the greatest labor saver known on any farm. The very best

**Grain Cradles, Scythes, Scythe Snaths,**  
**Horse Rakes, Gigg Rakes,**  
**Hand Rakes, &c.,**  
Including

THE CELEBRATED MORGAN CRADLE & SCYTHE  
THE CELEBRATED MULLEY SCYTHE SNATH,  
THE "EXCELSIOR" SCYTHE SNATH,  
BUSH SNATHS, WITH TWO HEEL RINGS,

**AN IMPROVED HORSE POWER,**  
For one or two horses, and a perfect charm of a

**DOG POWER.**  
For Churning, Washing, &c.

**Water's superior Grass Scythe.**  
This Scythe, of rolled and polished Steel, is beyond a doubt the NE PLUS ULTRA in the line of a Grass Scythe. No other Scythe has ever used one, would give it for one of any other kind.

**GOOD AND CHEAP STRAW CUTTERS.**  
All the desirable varieties of SHOVELS, SPADES, SCOOPS, HOES, TOOLS, RAKES, POTATO HOOKS, and FARMING AND GARDEN TOOLS generally, and all sorts of TOOL HANDLES.

**WATERS, LATHROP & McNAUGHTON,**  
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**LAWTON BLACKBERRIES FOR SALE**  
At the rate of \$2.00 per bushel, or per hundred by 7-3m

HUBBARD & DAVIS,  
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### SEEDS, SEEDS!

**FRESH SHAKER SEEDS, OF LAST YEARS**  
growth and warranted. Also, Spring Wheat, Sweet Potatoes of several kinds, King Philip, Flour, Dutton Eight Eared and Sweet Corn, Timothy, Clover, Barley Peas, &c.,

at FENFIELD'S,  
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### Dr. H. BIGELOW, OCUList,

(Office, Room No. 9 Sheldon Block, opposite the Peninsular Bank, Jefferson Ave., Detroit, Mich.) respectfully announces to the public generally that he is now engaged in treating the various diseases of the Eye, with much success. Many certificates and recommendations might here be given, but such things are so common at this day, that it is deemed sufficient merely to say to those afflicted, COME AND SEE. His treatment is the same as that practiced by the late Dr. George Bigelow.

[S]

### THE IMPLEMENT FOR GARDENS.

### THE HAND SCARIFIER.



**PRICE \$3.50.**

WE offer for sale the Hand Scarifier, the most desirable and useful implement for gardens, of any that has been invented, and the most perfect labor saver. Read the testimony of those who have tried it last season—

ROCHESTER, OAKLAND, CO., MICH., FEBY., 1859.

MESSRS. BLOSS & ADAMS:  
You cannot recommend too highly your Hand Scarifier. It is an invaluable machine for cultivating all root crops sown in drills. It works easy, a boy of 12 years old can use it and do more work than with a hoe in the same time. It pulverizes the surface of the ground and kills all the weeds. I had one the last season and speak from experience. A person having a quarter of an acre of garden to cultivate should not be without one and no farmer or gardener after using one a single hour would be without one for four times its cost.

W. JENNINGS.

MESSRS. BLOSS & ADAMS:  
In answer to your inquiry, "How we like the Hand Scarifier," we reply that we are highly pleased with it. It is the greatest labor saving machine for its cost that we have ever used or seen. For all root crops sown in drills it is invaluable. One man with this machine can do more work in one day than five can with a hoe, and do it better. We have used it two seasons and would rather pay twenty dollars for one than do without it.

Yours respectfully,  
J. ADAMS.

These implements are for sale, by the subscribers at their seed store,  
No. 22 Monroe Avenue, Detroit.

### THE GREAT PREMIUM MOWER. THE AULTMAN AND MILLER MOWING MACHINE.

**BUGEYE MOWER.**  
AULTMAN & MILLER'S  
PATENT.

PATENTED BY C. AULTMAN & L. MILLER.

To which was awarded the First Premium,  
a Gold Medal and Diploma, at the  
Great National Trial at  
Syracuse, N. Y.,  
July, 1857.

MANUFACTURED BY  
**C. AULTMAN & Co.,**  
Canton, Stark County, Ohio.

After toiling and experimenting for many years, we have finally succeeded in getting up a machine that is perfectly adapted to cut both Grain and Grass. The public are already aware that we have been manufacturing a Mowing Machine that has been unrivaled in any market.

But the Farmer wants a machine that will cut both grain and grass, provided he can get a combined machine that will mow as well as a machine made expressly for mowing; and reaper as well as a machine made expressly for reaping. This we furnish in our *New Machine*.

First.—We have a perfect Mower, having several advantages over all other Mowers, and no disadvantages, which will be readily seen by examining some of its points of excellence.

Second.—We have a perfect Reaper, which has all the advantages of a single machine, and the only true way of delivering the grain at the side of the machine.

We have a cutter bar and platform for cutting grain, independent of the Mower, so that in changing the Mower into a Reaper, we just uncouple the cutter bar at the hinge and couple the Reaper platform which renders the machine complete for cutting grain.

In having two cutter bars, one for grass and the other for grain, each is perfectly adapted for doing the work it is designed to do, thus avoiding the great difficulty heretofore existing in combined machines, in having the cutter bar either too long for grass or too short for grain.

This machine has been thoroughly tried, both in grass and grain, having had a number in use the past harvest.

The following are some of its points of excellence as a Mower:—

1st. It has not one pound of side draft.

2d. It has no more weight on the tongue, or horses' neck, than a wagon.

3d. Its draft is only 275 pounds—so reported by the Committee at the Ohio State Fair, 1857.

4th. It runs on two wheels which serve as drivers.

5th. It has an adjustable cutter bar and accommodates itself to an uneven surface of the ground.

6th. The cutter bar is in front of the driving wheels and the seat in the rear. Thus enabling the driver to see the operation of the cutters, without interfering with his driving. Also, avoiding all danger of falling into the knives.

7th. The driving wheels have no cogs on them, but drive the gearing by means of pulleys and ratchets.

8th. By means of these pulleys and ratchets, the knives cease to vibrate in backing the machine.

9th. The driver, while in his seat, can see every bolt, box, and all the gearing when the machine is in motion.

10th. The gearing is permanently arranged in the centre of the frame, distant from the driving wheels, thus avoiding all tendency of its being clogged up with mud or dirt thrown up by the drivers.

11th. The cutter bar being attached to the machine by means of hinges, can be folded up on top of the machine without removing the connecting rod, knife or track cleaner.

12th. The pulleys on the driving wheels can readily be thrown out of gear, and by folding the cutter bar as above stated, renders the machine as portable as a common cart.

13th. There is a wheel on the shoe next the gearing in front of the cutter bar, thus avoiding all tendency of clogging at the near shoe, in passing over cut grass.

14th. The off shoe is only 2 1/2 inches wide, and the last knife cuts no more than any other, therefore leaving no ridge or high stubble at the end of each swath.

15th. The cutter bar can be raised or lowered by means of an adjustable steel spring shoe at off end, and a slot in the near shoe where the wheel is attached.

16th. There are no nuts or screws at the connecting rod, which are always liable to cause more or less trouble by jerking loose, but use a gill with a spring pall and a ratchet key, thereby avoiding all possible chance of shaking loose.

**Points of excellence as a Reaper:—**

1st. It has all the advantages that the Mower has in the gearing, connecting rod, and draft for the horses.

2d. The grain is delivered at the side, so that a whole field can be cut without taking any of it up.

3d. The driver's seat is the same as on the Mower, affording him a free view of the operations of the machine.

4th. The raker stands at the rear of the platform which is the best position for delivering the grain.

5th. The raker with one motion, throws the grain to the side, then delivers it in the rear; thus avoiding the difficulty of dragging the grain from one gavel to another.

6th. The platform can readily be raised or lowered to suit all kinds of grain or ground, by means of two screws, at near side, and slot at off side, when off platform.

N. STEELE is the travelling agent, and is now soliciting orders in this State.

All letters of inquiry, or requesting further information, may be addressed to

**E. ARNOLD,**  
Dexter, General Agent, or

**BLOSS & CO., Special Agents, Detroit.**

### FRUIT TREES FOR SALE!

**125,000 APPLE TREES**  
OF THE  
**CHOICE VARIETIES.**

All thrifty vigorous trees. We sold from this Nursery last year to many Farmers and Fruit Cultivators, and have had no complaint of the trees dying. In every case where we have had an opportunity to examine them, they have lived and grown well, and of those we have heard from the testimony is the same. Also,

Pear, Peach, Cherry, Plum, Quince,  
AND OTHER VARIETIES,  
For sale by

**BLOSS & CO.,**  
No. 22 Monroe Avenue, Detroit.

### NALL, DUNCKLEE & CO.

Would invite the attention of the Farmers of Michigan, when visiting Detroit, to their extra

### SPRING STOCK OF CARPETS, FOREIGN AND DOMESTIC DRY GOODS,

Fancy Silks, Black Silks,  
Organdy Robes, Poshen Robes,  
Bayadere Robes, Bareges,  
Printed Robes, French Prints,  
Laces, Embroideries,  
Hosiery, Sheetings, Cloths,  
Flannels, Ticks, Printed Lawns,  
Cambrics, Gingham,  
Muslin de Laines,  
Stella Shawls, Broche Shawls.

### OUR CARPET AND FURNISHING STOCK

Is complete in all its branches.  
Tapestry Velvet Carpet,  
Tapestry Brussels do,  
Imperial Three Ply,  
Extra Super Ingrain,  
Superfine do, Fine Ingrain do,  
Cotton and Wool do.



# MICHIGAN FARMER.

R. F. JOHNSTONE, EDITOR.

Publication Office, 130 Jefferson Avenue.  
DETROIT, MICHIGAN.

S. FOLSOM,  
WOOL DEALER,  
90 Woodward Avenue,  
DETROIT, MICHIGAN.

## THE MARKETS.

**Flour and Meal.**

It will be noted that the latest arrivals from the other side of the Atlantic have completely used up the buoyancy which had characterized the markets for the past week or two, and almost as we predicted would the case. The little speculative fever that had arisen on the first declaration of war, has completely died out. There was not the least basis for it, and from the very state of facts which we laid before our readers a week ago, it seems that the dealers on both sides of the Atlantic have come to the same conclusions we did. The best time to sell for this spring has passed, and we doubt very much if as high prices for grain and breadstuffs can again be obtained this season, or until the result of the harvest is known with certainty. At New York there has been a decline of 25 cents per bushel on flour; at Chicago and Milwaukee we note a like change, and the late arrivals quote a decline in the price of wheat in the southern market of \$1.50 on the quarter of eight bushels.

The state of flour and wheat in this market may be seen in the following quotations from our morning papers:

"In consequence of the known arrival of the steamer Asia and the suspense respecting her news and its effects in New York, business has been very slack to-day. In flour nothing has been done, but rather more wheat changed hands than has before for several days, viz: 1,000 bushels which sold at \$1.50 and \$1.60 for all grades of winter."

"The market yesterday exhibited a little better turn, owing to the favorable news received by the Asia, which was received early in the morning. But few sales were made, however, and prices remained very much as they were the day before. Holders of extra were glad to realize at \$7.50, or a lower figure would be taken. As reported before a lot sold on Wednesday at \$7.37, and another was reported at \$7.25. The range for good extras is now \$7.37 to \$7.62. Wheat is not quite so firm. Lots of white and red winter amounting to 1,600 bushels are selling at \$1.55 to \$1.65. Corn was selling mostly at 88 cents in bags. Oats have declined to 55 to 56 cents, at which all the sales of the last two days have been made. Meal is selling at \$1.75 to \$1.87, and still tending downward."

**Live Stock, &c.**

We notice that the New York market for cattle of last week, and what we have learned of the market for cattle this week, indicates that prices are about at a stand still, the supply being large, owing in some degree to the low freights which now prevail. Several of the droves offered in New York last week from Illinois and Iowa, only cost at the rate of \$3.00 per head for transportation over the Michigan Central route via Buffalo and Albany. This is reasonably low, and no drover can very well grumble at such a price. It has given them a fine chance to make money, even at a decline. First class stock bring 12 cents on their estimated weight—that is about 50 to 54 lbs for every 100 of live weight. The low freights and the prices are having the effect of clearing the country pretty well of all the live stock, and there is a promise that the rates will keep up fairly during the season. We should not be surprised to see beef cattle scarce and high during the fall.

We take the following remarks and sales from the N. Y. Tribune of last week, for the instruction of some of our farmers who think that cattle are beef if they only have a hide, horns and frame:

"Geo. Sage sold at Bergen 35 for Warren, a very hard lot of Michigan butters at 9¢ to 11¢. Also 15 common coarse breed, altogether 20 common in that State, at 10¢ to 11¢, for J. F. Miles; and another lot of 20 head for another owner, all stages, average 6 cwt, at 8¢."

"Isaac Badlough has 50 Clinton, Mich., distillers, mostly steers, average 5 1/4 cwt, from ordinary to good fair quality, selling for Hamilton at 9¢ to 11¢. Also 15 common New York State stock, for P. Reed, at 10¢."

"Charles G. Teed has a hard lot of 77, from Michigan, owned by McCoy & Bryant, which he hopes to sell at 10¢ to 11¢, but it is rather slow work."

"Vall & Clark received this morning 80 heavy Michigan oxen, which, although of a rough, coarse breed, have been well fed—some of them quite fat, and of 10 cwt.—They estimate the sales at 10¢ to 11¢, and perhaps 12¢ for a few."

The Tribune of the 26th, says of this week's cattle market:

"The total number of beefs received in the city this week, was 2,700. This is 1,038 head less than last week, and 990 head less than the average of last year. The average number at each Wednesday market last year was 2,752, while the number to-day being 5,413 shows 989 head less than the average, and 785 head less than this day week."

Among the herds for sale we notice, from Michigan, those of M. Dalton, 18; and Shuster & Seigle, 30. There has been an advance of freight on the railroads since our last, all the roads leading out of Chicago now charging 70 cents per cwt. actual weight to New York, which makes the average now \$9.50 per head, instead of \$8.00.

The following are the quoted rates:

First quality.....	12	12 1/2 c.
Medium.....	11	11 1/2 c.
Ordinary.....	10	10 1/2 c.
Some extra good may be quoted at.....	12 1/2	c.
The general average of the market.....	11 1/2	c.
The most of the sales range from.....	11	12 c.

Beef cattle in this market are quoted the same as last week. Smith bought 16 head at 4 1/2 c. Mutton has declined a little.

**Wool.**

S. Folsom of this city has purchased a quantity of old wool, good quality, at 88 to 48 cents per pound. He says the State is full of buyers from the east, and that it is thought prices for the new clip will range from 40 to 45 cents.

We see it noted at Philadelphia that a few clips of the new crop have appeared in that market. Prices there are quoted as "rather dropping." The eastern markets generally exhibit but little animation, and the reports give very little information relative to what the future of wool is likely to be. The utmost uncertainty exists as to the effect that the war movements will have on this kind of produce, and we still are of the opinion that on this country it is not likely to have a favorable result, especially at the beginning. Should the war become general, there would be a strong probability of wool being higher than it has ever yet been in this country, but as long as England, Prussia and Germany keep out of the fight, there is ample reason for being of the opinion that prices will run low, from the immense importation that will be made at low rates of woolen goods, and which must contract in a great degree the action of the American manufacturers, who are the real consumers. This is so palpable that reasonable men must see it fully as plainly as we do.

The report from Boston for the last week is that "there is no change to notice in fleece or pulled wool since our last. Scarcely anything doing in fleece, as the stock is very much reduced, but of pulled there is a fair supply. New fleece will be arriving in five or six weeks."

The New York market is reported by the Economist as follows:

"The market this week opens dull. Large stocks of foreign clothing qualities have been accumulated, and holders manifest an anxious desire to realize, even at reduced rates, while consumers are reluctant to purchase, most of them buying barely sufficient to carry them to the new clip, now almost on hand."

## BLACK HAWK, Jun., 1st.

THIS favorite son of Old Vermont Black Hawk will stand for this season at the stable of the subscriber in the town of Plymouth, half a mile west of the village.

**Black Hawk Jun., 1st.**

Was sired by Old Vermont or Hill's famous Black Hawk; grand sire, Sherman Morgan; g. g. sire, Justin Morgan. His dam was by Young Hamiltonian, by Bishop's Hamiltonian, by Imported Messenger. The dam of Young Hamiltonian was by Leonidas, g. dam, by Belfounder. This horse is a jet black in color, is fifteen hands high, and closely resembles his sire in style and action. He possesses an excellent temper, is pleasant to drive, and goes in good style. He received the first premium at the N. Y. State Fair in 1857, beating Billy McCracken, of Oshkosh, Wis., and distanced all competitors in a trial of speed at the N. Y. State Fair at Syracuse in 1858. His stock are of good size, excellent in speed, style, and docility. T. W. MERRITT, Plymouth. Address the subscriber for terms and further information.

## VALUABLE SHORTHORNS AT AUCTION.

Thirteen head of Shorthorn Cattle, Thirteen head of Grade Cattle, AND ALSO

Horses, Colts, Hogs, Poultry, Fine Lumber and a large collection of Farming Implements

WILL BE SOLD AT AUCTION,

ON WEDNESDAY, JUNE 1st, 1859, at 10 o'clock A. M. at the residence of the late Leonard Lee in the town of Armada, Macomb county. Among the stock is the unrivaled BALCO, now four years old, and four cows selected with great care from some of the best herds in Kentucky and Ohio, with young stock raised from them. Breeders are here offered a rare chance to obtain some of the best stock in the State.

TERMS:—Eight months credit on all sums over \$5.00, on approved security.

HIRAM BARROWS, Administrator.

Armada, April 23, 1859.

## MR. VERNON BLACK HAWK.

SELECTION.

THIS well known stock horse can be found for this season at the Hodges Horse Stable, Pontiac, Tuesday; at the farm of the subscriber, Thursday; at the Stable of the American Hotel, Rome, Saturdays.

**Pedigree:**

Sire, Ticonderoga, (or Felton Horse); g. sire, Hill's Old Black Hawk; g. g. sire, Justin Morgan. Dam, descended from Messenger.

Within two years this horse has received seven First prizes. First premium for all work and diploma against Foreign Horses at the last Michigan State Fair.

The others at County Fairs. His stock received First Premiums at the Michigan State, and Macomb and Oakland County Fairs last fall.

His colts, many of them have sold for large prices. E. D. Bush Esq., of Shraham, Addison Co., Vt., one of the best horse breeders in the State, in a letter dated January 10, 1859, says: "I have just sold a mare four years old last spring, bred by Mr. S. Root, Westport, N. Y., sired by your horse, Seneca, for \$1,425 cash. She was jet black, stood 16 1/2 hands high and could trot fast."

TERMS: By Season \$10.00—to insure with foal \$15.00. Good pasture at the farm of the subscriber at fifty cents per week. All accidents and escapes at the owner's risk.

E. R. SMITH, Jr., Mt. Vernon, Macomb Co., Mich., April, 1859. 17-6v

## 1859.

## THE CLEVELAND WOOL DEPOT

Has been established over six years, and it affords the subscribers much satisfaction to know that its merits are fully appreciated by those who have patronized it during this entire time. The change made one year ago in confining its sales to cash, has met with universal favor. It is proposed to continue the cash system, and future consignors may rely upon the same prompt return which characterized our last year's business. Perhaps not quite as high figures can be obtained by adhering strictly to cash, but it will insure prompt returns, and hundreds have assured us that they obtained from free to ten cents a pound more through the Depot than they were offered last Spring from other sources, and we believe this has been true every year excepting a few of the consignments during the Fall of 1857. It should, therefore, no longer remain a question in the minds of

**Wool Growers or Merchants**

having Wool to dispose of, that this system of closely classifying and handling wool will prove the very best manner of selling wool which has yet been adopted.

Sacks will be sent as heretofore to those who may order.

To those wishing to realize on their wool as soon as short, advances will be made.

AMOUNTING TO THE VALUE OF THE WOOL, PROVIDING THE CONSIGNEES WILL ALLOW THEM OFFERED FOR SALE AT THE FIRST OR EARLY PRICES.

Each advance will be made on receipt of Wool or Shipping Bill, as formerly.

We trust that the liberal Cash advances, the long experience in the Depot business, and established reputation of our grades among manufacturers, with undivided attention to our consignors' interests, will insure us a liberal patronage.

GOODALE & CO., Cleveland, Ohio.

## FURNITURE WAREHOUSE,

ON JEFFERSON AVENUE, BELOW MICHIGAN EXCHANGE, DETROIT.

The subscribers keep constantly on hand a large stock of

**ELEGANT FURNITURE,**

Both Modern and Antique Styles; in Rosewood, Mahogany and Domestic Wood.

These wishing rich and fashionable furniture, will always find a great variety to select from—equal in every respect to anything in the Eastern market. Being in constant receipt of Pattern Pieces from the

**FASHIONABLE MAKERS IN NEW YORK,** they are enabled to guarantee the most **Perfect Satisfaction** to their customers.

They also keep constantly on hand a large and complete assortment of Plain Furniture of Mahogany, Cherry and Walnut. In short, every article in the line of Household Furniture will be found in their Stock, including Chairs of every style and price, from four shillings to sixty dollars each. The subscribers now have on hand, and make to order, best

**HAIR MATTRESSES.**

Their customers can rely upon getting a genuine article. **CORN-HUSK MATTRESSES & STRAW PALLIASES** constantly on hand. For the trade we keep constantly a large stock of Mahogany and Rosewood Vases.

STEVENS & ZUG.

## DRAIN TILE!

WE KEEP CONSTANTLY ON HAND THE different kinds of Drain Tile, at

PENFIELD'S, 108 Woodward Avenue.

## Horse Powers, Threshers and Cleaners!

PITT'S 8 AND 10 HORSE, EMERY'S 1 AND 2 HORSE (read) Powers, Pease's Excelsior Powers, Oliver and Cob Mills, Corn Mill and Feed Mills, Flour Mills, Cross-cut and Circular Saw Mills, Leonard Smith's Smut Machines.

D. O. & W. S. PENFIELD, No. 108 Woodward Ave., Detroit.

## SUFFOLK AND

**ESSEX PIGS FOR SALE.**

THOROUGH BRED SUFFOLK AND ESSEX PIGS for sale. For particulars, address

J. S. TIBBETS, Nankin, Mich.

## AGRICULTURAL BLACKSMITHING.

**HUNTER & MOIR,**

AGRICULTURAL IMPLEMENT MAKERS, NORTHVILLE, Wayne Co., Mich., are prepared to make to order the latest and most approved style of SCOTCH IRON PLOWS, IRON and WOODEN HARROWS, SCOTCH GRUBBERS or CULTIVATORS with three wheels, also single cultivators—all of wrought iron. All communications promptly responded to, and all orders filled with despatch.

HUNTER & MOIR, Northville Wayne Co., Mich.

## AYER's CHERRY PECTORAL

HAS won for itself such a renown for the cure of every variety of Throat and Lung Complaint, that it is entirely unnecessary for us to recount the evidence of its virtues, wherever it has been employed. As it has long been in constant use throughout this section, we need not do more than assure the people its quality is kept up to the best it has ever been, and that it may be relied on to do for their relief all it has ever been found to do.

## AYER's CATHARTIC PILLS,

For all the Purposes of a Purgative Medicine.

FOR COSTIVENESS; FOR THE CURE OF DYSPEPSIA; FOR JAUNDICE; FOR THE CURE OF INDIGESTION; FOR HEADACHE; FOR THE CURE OF DYSENTERY; FOR A FULS STOMACH; FOR THE CURE OF DYSENTERY; FOR THE PILLS; FOR THE CURE OF SCOPULUS; FOR ALL SCOPULUS COMPLAINTS; FOR THE CURE OF RHEUMATISM; FOR DISEASES OF THE SKIN; FOR THE CURE OF LIVER COMPLAINT; FOR DROPSY; FOR THE CURE OF TETTER, TUMORS AND SALT RHEUM; FOR THE CURE OF GOUT; FOR A DINNIE PILL; FOR THE CURE OF NEURALGIA; FOR PURIFYING THE BLOOD.

They are sugar-coated, so that the most sensitive can take them pleasantly, and they are the best aperient in the world for all the purposes of a family.

Price 25 cents per Box; five Boxes for \$1.

Great numbers of Clergymen, Physicians, Statesmen, and eminent persons, have lent their names to certify the unparalleled usefulness of these remedies, but our space here will not permit the insertion of them. The Agents below named furnish gratis our AMERICAN ALMANAC in which they are given; with also full descriptions of the above complaints, and the treatment that should be followed for their cure.

Do not be put off by unprincipled dealers with other preparations they make more profit on. Demand Ayer's, and take no others. The sick want the best aid there is for them, and they should have it.

Prepared by Dr. J. C. AYER, PRACTICAL AND ANALYTICAL CHEMIST, Lowell, Mass.

All our remedies are for sale by J. S. Farrand, Detroit, and by all Druggists every where.

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## THE TROTTER STALLION

**HAMBLETONIAN,**

Will stand for mares the ensuing Season commencing April 4th, as follows:

At JOHN CLARK'S, Milford, Mondays and Tuesday;

At JOHN HATHAN'S, New Hudson, Wednesdays;

At SAM'L LATHROP'S, Northville, Tuesdays;

At JAMES ROOTS, Plymouth, Fridays and Saturdays;

Leaving each place at 5 o'clock P. M.

From the general complaint of poor crops last year I have concluded to reduce the price of my horse for this Season.

Season money—\$10 the Season; \$15 to Insure.

Season money to be paid when the Mare is first served, or a good note given for the amount. Persons, parting with mares before foaling time will be held responsible for the season money. All mares not regularly returned will be held by the season. Pasture furnished at fifty cents per week. All accidents and escapes at the owner's risk. Season to close on the first of August, 1859. Grain will be received for insurance money, delivered at my farm on or before the first day of February, 1860, at Detroit prices.

HAMBLETONIAN was awarded the First Premium at the Oakland County Fair, October, 1857.

At the State Fair in Detroit last fall his colts took more premiums than any other Stallion in the State.

**Pedigree of Hambletonian.**

HAMBLETONIAN was sired by Geo. Barney's horse Henry, of Whitehall, Washington county, New York—he by Imported Signal, out of a Messenger mare. Hambletonian's dam by Mambrino, granddam Bishop's Hambletonian who was sired by Imported Messenger. Hambletonian is 15 1/2 hand high, weighs 1150 pounds; possessing fine action, with great powers of endurance; untrained, but shows good evidence of speed. Hambletonian is a beautiful blooded, black mane, tail and limbs, without a white hair upon him, and for style can not be excelled by any horse in the State.

F. E. ELDERED, Detroit.

## THE YOUNG TROTTER STALLION,

**KEMBLE JACKSON,**

Will stand for mares the coming season, at Spring Brook Farm, adjoining the Village of Farmington, Oakland county Mich., commencing April 4th.

Owing to the extreme hard times among farmers—loss of crops the past season, &c., I have concluded to reduce the price of my horses.

KEMBLE JACKSON will stand at \$20 the season. Money to be paid when mare is first served or a good note given for the amount.

Good pasture furnished at fifty cents per week. All accidents and escapes at the owners risk. Season to close on the 30th day of July 1859.

**Pedigree of Kemble Jackson:**

KEMBLE JACKSON—(Half-sister to Lola)—Mahogany bay, 16 hands high. Star in his forehead; hind feet white half way up to gambrel joints. Foaled June 14, 1854. The property of Isaac Akin, Pauling, Dutchess Co., N. Y. Sire, Kemble Jackson; dam, Lady Moore.

Kemble Jackson was by Andrew Jackson; his dam, Fanny Kemble, sister to Charles Kemble, and sired by Sir Archy; her dam was Maria, sired by Gallatin; Maria's dam was got by Simms' Wildair, she out of a mare got by Morton's Traveller; her dam was an imported mare, name unknown, but she was perfectly sound.

Andrew Jackson was by Young Bashaw; dam by Why-not by Imp. Messenger. Young Bashaw was by the Imp. Tripollitan Barb, Grand Bashaw; Young Bashaw's dam was a daughter of Messenger, said to be thoroughbred.

Lady Moore was out of Messenger Maid, by Membrino Paymaster; he by Old Membrino, by Imp. Messenger.

F. E. ELDERED, Detroit.

## THE YOUNG TROTTER STALLION

**ISLAND JACKSON,**

Will stand for mares the coming Season at Spring Brook Farm, adjoining the Village of Farmington, Oakland county, Commencing April 4th, at the reduced price of \$10 the Season.

Season money to be paid when mare is first served or a good note given for the amount.

Good pasture furnished at fifty cents per week, all accidents and escapes at the owners risk. Season to close July 30th, 1859.

**Pedigree of Island Jackson:**

Island Jackson was by Young Bashaw; dam, Why-not by Imp. Messenger. Young Bashaw, by the Imp. Tripollitan Barb, Grand Bashaw; dam, Messenger.

F. E. ELDERED, Detroit.

## THE TROTTER STALLION

**GLEN BLACK HAWK,**

Will stand for mares the ensuing Season as follows: At Redford, Hicks' Tavern, Mondays and Tuesdays; at Detroit, Gratiot Road 1 1/2 miles from City Hall, Wednesdays and Thursdays; at Grosse Isle, Bachelus Farm, Fridays and Saturdays.

Season to commence April 4th, and close July 30th.

TERMS:—\$10 the season; \$15 to Insure.

Season money to be paid when mare is first served or a good note given for the amount.

**Pedigree of Glen Black Hawk.**

Sire, Lone Star, by Old Vermont Black Hawk; dam, Messenger.

L. T. BULLARD, Agent.

## DAINES' AMERICAN

**DRAIN TILE MAKER.**

The Best and Cheapest Tile Machine in the World.

Forty-one first Premiums awarded to it at State and County Fairs. First

Premium at the National Fair, at Louisville, Ky., 1857.

The TILE MACHINE invented by JOHN DAINES, of Birmingham, Oakland county, Michigan, is now being manufactured in the most thorough manner, and is offered to the farming community as the

**Cheapest, Most Labor-Saving and Most Complete Invention,**

and enabling farmers to make their own Tiles, that has yet been put before the Agriculturists of the United States, at a reduced price.

These machines are made of iron, are easily worked, any man being able to manufacture a first rate article after a few hours practice.

They cost delivered in Detroit, only \$100. They have two sizes for three and four inch tile; and extra dies to accompany the machine cost \$2.00 each.

These machines will manufacture per day, according to the force employed, from 150 TO 250 RODS OF HORSEHOE OR PIPE TILE. The machine weighs but 500 pounds, and can be packed and sent to any part of the United States, or to foreign countries, as easily as a piano. With this machine, any farmer who has a fair quality of clay on his farm, can manufacture his own Tiles at a cheap rate, and easily save the price of the machine by avoiding the cost of transportation. The machine when in operation, takes up no more room than an ordinary sized kitchen table; it may be worked by two or three men as may be found most convenient and the farming community as the

**For Simplicity, Durability, Economy, Cheapness, and amount of work, this Tile Maker Challenges the World!**

At the present time, when thorough draining has become a necessity on alluvial lands, it offers the simplest and cheapest means of furnishing farmers with a drain for material far superior to any other material now used for that purpose.